WEST Search History

Hide Items Restore Clear Cancel

DATE: Wednesday, March 02, 2005

| Hide? | Set Name | Query | Hit Count |
|-------|----------|--|-----------|
| | DB=PGP | B,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YE | S; OP=ADJ |
| | L16 | = 2001 | 46 |
| | L15 | L14 AND L7 | 104 |
| | L14 | L13 AND L11 | 1083 |
| | L13 | (yeast AND recombinant AND IL-2) | 8339 |
| | L12 | L8 AND L11 | 12 |
| | L11 | brain tumor | 7499 |
| | L10 | L8 AND L9 | 135 |
| | L9 | tumor OR cancer | 251319 |
| | L8 | L6 AND L7 | 135 |
| | L7 | LAK OR lymphokine-activated killer cells | 4796 |
| | L6 | = 2001 | 189 |
| | L5 | L1 AND L4 | 250 |
| | L4 | (adoptive immunotherapy) | 1313 |
| | L3 | (L2) AND (2001)[PY] | 35 |
| | L2 | L1 AND yeast | 508 |
| | L1 | (recombinant interleukin-2 OR rIL-2) | 1188 |

END OF SEARCH HISTORY









of Medicine Mucleotide Structure OMIM Journals Book Search PubMed for yeast recombinant interleukin Go Clear Save Sea Preview/Index History Clipboard Details Display | Summary Show: 500 Sort Send to * About Entrez All: 242 Review: 11 Text Version Items 1 - 242 of 242 One page. Entrez PubMed 1: Wiseman A. Related Articles, Links Overview Help | FAQ Avoidance of oxidative-stress perturbation in yeast bioprocesses by Tutorial proteomic and genomic biostrategies? New/Noteworthy Lett Appl Microbiol. 2005;40(1):37-43. E-Utilities PMID: 15613000 [PubMed - in process] PubMed Services 1 2: Lin Y, Ya-Li Q, Wei-Cheng B, Xiao-Lan Y, Hong-Liang H, Huan-Related Articles, Links Journals Database MeSH Database Expression of an interleukin-6 - interleukin-2 fusion protein (pIL-6-IL-2) in Single Citation Matcher **Batch Citation Matcher** P. pastoris. Clinical Queries Eur Cytokine Netw. 2004 Jul-Sep; 15(3):240-6. i.inkOut PMID: 15542449 [PubMed - in process] My NCBI (Cubby) 3: Montagnoli C, Sandini S, Bacci A, Romani L, La Valle R. Related Adicles, Links Related Resources Immunogenicity and protective effect of recombinant enclase of Candida Order Documents albicans in a murine model of systemic candidiasis. **NLM Catalog** Med Mycol. 2004 Aug;42(4):319-24. NLM Gateway PMID: 15473356 [PubMed - indexed for MEDLINE] TOXNET Consumer Health 4. Mullick A, Elias M, Picard S, Bourget L, Jovcevski O, Gauthier S, Clinical Alerts Related Articles, Links Tuite A. Harakidas P. Bihun C. Massie B. Gros P. ClinicalTriats.gov PubMed Central Dysregulated inflammatory response to Candida albicans in a C5-deficient mouse strain. Infect Immun. 2004 Oct;72(10):5868-76. PMID: 15385488 [PubMed - indexed for MEDLINE] 5: Huang W. Na L. Fidel PL. Schwarzenberger P. Related Articles, Links Requirement of interleukin-17A for systemic anti-Candida albicans host defense in mice. J Infect Dis. 2004 Aug 1;190(3):624-31. Epub 2004 Jun 22. PMID: 15243941 [PubMed - indexed for MEDLINE] 6: Wedlock DN, McCarthy AR, Doolin EE, Lacy-Hulbert SJ, Woolford Related Articles, Links MW. Buddle BM. Effect of recombinant cytokines on leucocytes and physiological changes in bovine mammary glands during early involution. J Dairy Res. 2004 May;71(2):154-61. PMID: 15190942 [PubMed - indexed for MEDLINE]

Involvement of GSK-3beta in TWEAK-mediated NF-kappaB activation. FEBS Lett. 2004 May 21;566(1-3):60-4.

PMID: 15147869 [PubMed - indexed for MEDLINE]

7: De Ketelaere A. Vermeulen L. Vialard J, Van De Weyer I, Van

8: Jang HD, Yoon K, Shin YJ, Kim J, Lee SY.

Wauwe J. Haegeman G. Moelans I.

Related Articles, Links

Related Articles, Links



PIAS3 suppresses NF-kappaB-mediated transcription by interacting with the p65/RelA subunit.

J Biol Chem. 2004 Jun 4;279(23):24873-80. Epub 2004 Mar 26. PMID: 15140884 [PubMed - indexed for MEDLINE]

9: Donnini C, Farina F, Neglia B, Compagno MC, Uccelletti D, Goffrini P, Palleschi C.

Related Articles, Links



Improved production of heterologous proteins by a glucose repression-defective mutant of Kluyveromyces lactis.

Appl Environ Microbiol. 2004 May;70(5):2632-8. PMID: 15128512 [PubMed - indexed for MEDLINE]

1 10: Tang N. Liu L. Kang K. Mukherjee PK. Takahara M. Chen G. McCormick TS, Cooper KD, Ghannoum M.

Related Articles, Links



Inhibition of monocytic interleukin-12 production by Candida albicans via selective activation of ERK mitogen-activated protein kinase.

Infect Immun. 2004 May;72(5):2513-20.

PMID: 15102758 [PubMed - indexed for MEDLINE]

11: Stuyt RJ, Netea MG, van Krieken JH, van der Meer JW, Kullberg Related Articles, Links

Recombinant interleukin-18 protects against disseminated Candida albicans infection in mice.

J Infect Dis. 2004 Apr 15;189(8):1524-7. Epub 2004 Apr 01. PMID: 15073691 [PubMed - indexed for MEDLINE]

12: Borghaei RC, Rawlings PL Jr, Javadi M, Woloshin J.

Related Articles, Links



NF-kappaB binds to a polymorphic repressor element in the MMP-3 promoter.

Biochem Biophys Res Commun. 2004 Mar 26;316(1):182-8. PMID: 15003528 [PubMed - indexed for MEDLINE]

13: Zhu N. Gao N, Wang Y, Wang X, Yang Y.

Related Articles, Links

Expression of the negative co-stimulatory ligand sCD152 in the yeast, Pichia pastoris, and its regulation of antigen specific immune responses. Int Immunopharmacol. 2004 Jan;4(1):139-48.

PMID: 14975368 [BubMed_indexed for MEDI INFI]

PMID: 14975368 [PubMed - indexed for MEDLINE]

14: Diniz SN, Nomizo R, Cisalpino PS, Teixeira MM, Brown GD, Mantovani A, Gordon S, Reis LF, Dias AA.

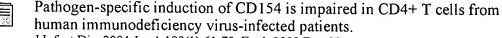
Related Articles, Links



PTX3 function as an opsonin for the dectin-1-dependent internalization of zymosan by macrophages.

J Leukoc Biol. 2004 Apr;75(4):649-56. Epub 2004 Jan 14. PMID: 14726497 [PubMed - indexed for MEDLINE]

1. 15: Subauste CS. Wessendarp M. Portilllo JA, Andrade RM, Hinds LM, Gomez FJ, Smulian AG, Grubbs PA, Haglund LA



J Infect Dis. 2004 Jan 1,189(1):61-70. Epub 2003 Dec 23. PMID: 14702154 [PubMed - indexed for MEDLINE]

16: Buryskova M. Pospisek M. Grothey A. Simmet T. Burysek L. Related Articles, Links



Intracellular interleukin-lalpha functionally interacts with histone acetyltransferase complexes.

J Biol Chem. 2004 Feb 6;279(6):4017-26. Epub 2003 Nov 11. PMID: 14612453 [PubMed - indexed for MEDLINE]

17: Romagnoli G, Nisini R, Chiani P, Mariotti S, Teloni R, Cassone A, Related Articles, Links Torosantucci A.

cb hg e e fcg

h

e ch

b e



The interaction of human dendritic cells with yeast and germ-tube forms of Candida albicans leads to efficient fungal processing, dendritic cell maturation, and acquisition of a Th1 response-promoting function.

J Leukoc Biol. 2004 Jan;75(1):117-26. Epub 2003 Oct 02.

PMID: 14525965 [PubMed - indexed for MEDLINE]

18: Hu B, Wang S, Zhang Y, Feghali CA, Dingman JR, Wright TM. Related Articles, Links



A nuclear target for interleukin-lalpha: interaction with the growth suppressor necdin modulates proliferation and collagen expression. Proc Natl Acad Sci U S A. 2003 Aug 19;100(17):10008-13. Epub 2003 Aug 11. PMID: 12913118 [PubMed - indexed for MEDLINE]

19: Zhu JK, Xu ZX, Huang WD, Ming TS, Xie W, Xu Y, Zhang XG. Related Articles, Links

[Expression and purification of recombinant human interleukin-11 in Pichia pastoris]

Zhongguo Yi Xue Ke Xue Yuan Xue Bao. 2001 Apr;23(2):127-31. Chinese. PMID: 12905887 [PubMed - indexed for MEDLINE]

20: Strelow A, Kollewe C. Wesche H.

Related Articles, Links

Characterization of Pellino2, a substrate of IRAK1 and IRAK4. FEBS Lett. 2003 Jul 17;547(1-3):157-61.

PMID: 12860405 [PubMed - indexed for MEDLINE]

1 21: Hamza A, Kebaier K, Vasilescu D, Sarma MH, Sarma RH. Related Articles, Links

Molecular modeling of a Leishmania antigen eIF-4A: identification of a potential epitope implicated in the adjuvant effect.

J Biomol Struct Dyn. 2003 Aug;21(1):43-53. Erratum in: J Biomol Struct Dyn. 2003. Oct;21(2):following table of contents.

PMID: 12854958 [PubMed - indexed for MEDLINE]

22: Vanlandschoot P, Van Houtte F, Hoek F, Nieuwland R, Leroux-Roels G. Related Articles, Links

Saccharomyces cerevisiae-derived HBsAg preparations differ in their attachment to monocytes, immune-suppressive potential, and T-cell immunogenicity.

J Med Virol. 2003 Aug;70(4):513-9.

PMID: 12794712 [PubMed - indexed for MEDLINE]

23: Bahi N. Friocourt G. Carrie A. Graham ME, Weiss JL, Chafey P. Related Articles, Links Fauchereau F, Burgovne RD, Chelly J.



IL1 receptor accessory protein like, a protein involved in X-linked mental retardation, interacts with Neuronal Calcium Sensor-1 and regulates exocytosis.

Hum Mol Genet. 2003 Jun 15;12(12):1415-25.

PMID: 12783849 [PubMed - indexed for MEDLINE]

24: Degelmann A, Muller F, Sieber H, Jenzelewski V, Suckow M, Strasser AW, Gellissen G.

Related Articles, Links

Strain and process development for the production of human cytokines in Hansenula polymorpha.

FEMS Yeast Res. 2002 Aug;2(3):349-61.

PMID: 12702285 [PubMed - indexed for MEDLINE]

25: Lee J. Park JS, Moon JY, Kim KY, Moon HM.

Related Articles, Links

The influence of glycosylation on secretion, stability, and immunogenicity of recombinant HBV pre-S antigen synthesized in Saccharomyces cerevisiae.

Biochem Biophys Res Commun. 2003 Apr 4;303(2):427-32.

PMID: 12659834 [PubMed - indexed for MEDLINE]

h

cb

hg e e e fcg

e ch

b e

26: Lebedev VF, Kozlov VK, Gavrilin SV. Related Articles, Links [Immunopathogenesis of severe wounds and traumas: possibilities of immune correction] Vestn Khir Im I I Grek. 2002;161(4):85-90. Russian. PMID: 12577564 [PubMed - indexed for MEDLINE] 27: Wang O, Yang L. Quyang J, Long Q, Wang X. Related Articles, Links [Expression of human leukemia inhibitory factor gene in Pichia pastoris] Wei Sheng Wu Xue Bao. 2001 Oct;41(5):582-6. Chinese. PMID: 12552806 [PubMed - indexed for MEDLINE] 28: Vanlandschoot P, Roobrouck A, Van Houtte F, Leroux-Roels G. Related Articles, Links Recombinant HBsAg, an apoptotic-like lipoprotein, interferes with the LPS-induced activation of ERK-1/2 and JNK-1/2 in monocytes. Biochem Biophys Res Commun. 2002 Sep 27;297(3):486-91. PMID: 12270119 [PubMed - indexed for MEDLINE] 29: Matsumoto H, Liao S, Arakawa F, Ueno A, Abe H, Awasthi A. Related Articles, Links Kuroki M, Kuroki M. Targeting of interleukin-2 to human MK-1-expressing carcinoma by fusion with a single-chain Fv of anti-MK-1 antibody. Anticancer Res. 2002 Jul-Aug;22(4):2001-7. PMID: 12174877 [PubMed - indexed for MEDLINE] ☐ 30: Deepe GS Jr, Gibbons RS. Related Articles, Links Cellular and molecular regulation of vaccination with heat shock protein 60 from Histoplasma capsulatum. Infect Immun. 2002 Jul;70(7):3759-67. PMID: 12065519 [PubMed - indexed for MEDLINE] 31: Wang TY, Wang CM, Wei G, Qiu JW, Huang YS Related Articles, Links Expression of the Recombinant Human Interleukin-11 in Pichia pastoris. Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao (Shanghai). 2001;33(6):659-664. PMID: 12035058 [PubMed - as supplied by publisher] 32: Wu L. Fu J. Shen SH. Related Articles, Links SKAP55 coupled with CD45 positively regulates T-cell receptor-mediated gene transcription. Mol Cell Biol. 2002 Apr;22(8):2673-86. PMID: 11909961 [PubMed - indexed for MEDLINE] 33: Svirshchevskaya EV, Alekseeva L, Marchenko A, Viskova N, Related Articles, Links Andronova TM, Benevolenskii SV, Kurup VP. Immune response modulation by recombinant peptides expressed in viruslike particles. Clin Exp Immunol. 2002 Feb;127(2):199-205. PMID: 11876740 [PubMed - indexed for MEDLINE] 34: Chen D, Li X, Zhai Z, Shu HB. Related Articles, Links A novel zinc finger protein interacts with receptor-interacting protein (RIP) and inhibits tumor necrosis factor (TNF)- and IL1-induced NF-kappa B activation. J Biol Chem. 2002 May 3;277(18):15985-91. Epub 2002 Feb 19. PMID: 11854271 [PubMed - indexed for MEDLINE] 35: Jahn T, Seipel P, Urschel S, Peschel C, Duyster J Related Articles, Links

Role for the adaptor protein Grb10 in the activation of Akt.

h cb hg e e e fcg e ch b e

Mol Cell Biol. 2002 Feb;22(4):979-91.

PMID: 11809791 [PubMed - indexed for MEDLINE]

36: Near KA, Stowers AW, Jankovic D, Kaslow DC.

Related Articles, Links



Improved immunogenicity and efficacy of the recombinant 19-kilodalton merozoite surface protein 1 by the addition of oligodeoxynucleotide and aluminum hydroxide gel in a murine malaria vaccine model.

Infect Immun. 2002 Feb;70(2):692-701.

PMID: 11796601 [PubMed - indexed for MEDLINE]

37: Fan GH, Yang W, Sai J, Richmond A.

Related Articles, Links



Hsc/Hsp70 interacting protein (hip) associates with CXCR2 and regulates the receptor signaling and trafficking.

J Biol Chem. 2002 Feb 22;277(8):6590-7. Epub 2001 Dec 19. PMID: 11751889 [PubMed - indexed for MEDLINE]

38: Choi SI, Song HW, Moon JW, Seong BL.

Related Articles, Links



Recombinant enterokinase light chain with affinity tag: expression from Saccharomyces cerevisiae and its utilities in fusion protein technology. Biotechnol Bioeng. 2001 Dec 20;75(6):718-24.

PMID: 11745150 [PubMed - indexed for MEDLINE]

1739: Chen CY, Gherzi R, Ong SE, Chan EL, Raijmakers R, Pruijn GJ, Stoecklin G, Moroni C, Mann M, Karin M.

Related Articles, Links



AU binding proteins recruit the exosome to degrade ARE-containing mRNAs.

Cell. 2001 Nov 16;107(4):451-64.

PMID: 11719186 [PubMed - indexed for MEDLINE]

1 40: Kawakami K, Kinjo Y, Yara S, Uezu K, Koguchi Y, Tohyama M. Related Articles, Links Azuma M, Takeda K, Akira S, Saito A.



Enhanced gamma interferon production through activation of Valpha14(+) natural killer T cells by alpha-galactosylceramide in interleukin-18-deficient mice with systemic cryptococcosis.

Infect Immun. 2001 Nov;69(11):6643-50.
PMID: 11598033 [PubMed - indexed for MEDLINE]

41: Yin H, Morioka H, Towle CA, Vidal M, Watanabe T, Weissbach L. Related Articles, Links



Evidence that HAX-1 is an interleukin-1 alpha N-terminal binding protein. Cytokine. 2001 Aug 7;15(3):122-37.

PMID: 11554782 [PubMed - indexed for MEDLINE]

1 42: Huang YS, Dong Y, Li H, Wang TY, Qiu JW, Yu YN.

Related Articles, Links



[Purification and characterization of recombinant human interleukin 11 which expressed by Pichia pastoris]

Sheng Wu Gong Cheng Xue Bao. 2001 May;17(3):250-3. Chinese. PMID: 11517594 [PubMed - indexed for MEDLINE]

1 43: Bao WG, Fukuhara H.

Related Articles, Links



Secretion of human proteins from yeast: stimulation by duplication of polyubiquitin and protein disulfide isomerase genes in Kluyveromyces lactis.

Gene. 2001 Jul 11;272(1-2):103-10.

PMID: 11470515 [PubMed - indexed for MEDLINE]

1 44: Yang S, Sellins KS, Weber E, McCall C.

Related Articles, Links



Canine interleukin-5: molecular characterization of the gene and expression of biologically active recombinant protein.

J Interferon Cytokine Res. 2001 Jun;21(6):361-7.

b e

cb hgeeefcg ech

PMID: 11440633 [PubMed - indexed for MEDLINE]

45: Gilbert M.

Related Articles, Links

A view of the future: Dr. Mark Gilbert of Immunex talks about immune based therapy. Interview by Robert Nielsen.

STEP Perspect. 1998 Winter; 98(1):15-7.

PMID: 11365210 [PubMed - indexed for MEDLINE]

1. 46: Nisini R, Romagnoli G, Gomez MJ, La Valle R, Torosantucci A. Related Articles, Links Mariotti S, Teloni R. Cassone A.



Antigenic properties and processing requirements of 65-kilodalton mannoprotein, a major antigen target of anti-Candida human T-cell response, as disclosed by specific human T-cell clones.

Infect Immun. 2001 Jun;69(6):3728-36.

PMID: 11349037 [PubMed - indexed for MEDLINE]

47: Bourette RP, De Sepulveda P, Arnaud S, Dubreuil P, Rottapel R. Related Articles, Links Mouchiroud G.



Suppressor of cytokine signaling 1 interacts with the macrophage colony-stimulating factor receptor and negatively regulates its proliferation signal. J Biol Chem. 2001 Jun 22;276(25):22133-9. Epub 2001 Apr 10. PMID: 11297560 [PubMed - indexed for MEDLINE]

1 48: Uranishi H, Tetsuka T, Yamashita M, Asamitsu K, Shimizu M, Itoh Related Articles, Links M, Okamoto T.



Involvement of the pro-oncoprotein TLS (translocated in liposarcoma) in nuclear factor-kappa B p65-mediated transcription as a coactivator. J Biol Chem. 2001 Apr 20;276(16):13395-401. Epub 2001 Jan 24.

PMID: 11278855 [PubMed - indexed for MEDLINE]

49: Fan GH, Yang W, Sai J, Richmond A

Related Articles, Links



Phosphorylation-independent association of CXCR2 with the protein phosphatase 2A core enzyme.

J Biol Chem. 2001 May 18;276(20):16960-8. Epub 2001 Feb 26. PMID: 11278485 [PubMed - indexed for MEDLINE]

50: Klasing KC, Peng RK

Related Articles, Links



Soluble type-I interleukin-1 receptor blocks chicken IL-1 activity.

Dev Comp Immunol. 2001 May;25(4):345-52.

PMID: 11246074 [PubMed - indexed for MEDLINE]

51: Xu Y, Tao X, Shen B, Horng T, Medzhitov R, Manley JL, Tong L. Related Articles, Links



Structural basis for signal transduction by the Toll/interleukin-1 receptor domains.

Nature. 2000 Nov 2;408(6808):111-5.

PMID: 11081518 [PubMed - indexed for MEDLINE]

52: Davis R, Schooley K, Rasmussen B, Thomas J, Reddy P.

Related Articles, Links



Effect of PDI overexpression on recombinant protein secretion in CHO cells.

Biotechnol Prog. 2000 Sep-Oct;16(5):736-43.

PMID: 11027164 [PubMed - indexed for MEDLINE]

53: Rycyzyn MA, Reilly SC, O'Malley K, Clevenger CV.

Related Articles, Links



Role of cyclophilin B in prolactin signal transduction and nuclear retrotranslocation.

Mol Endocrinol. 2000 Aug; 14(8):1175-86.

PMID: 10935542 [PubMed - indexed for MEDLINE]

54: Westra DF, Verjans GM, Osterhaus AD, van Kooij A, Welling Related Adicles, Links GW, Scheffer AJ, The TH, Welling-Wester S. Natural infection with herpes simplex virus type 1 (HSV-1) induces humoral and T cell responses to the HSV-1 glycoprotein H:L complex. J Gen Virol. 2000 Aug;81(Pt 8):2011-5. PMID: 10900040 [PubMed - indexed for MEDLINE] 55: Wedlock DN, Doolin EE, Parlane NA, Lacy-Hulbert SJ, Woolford Related Articles, Links MW, Buddle BM. Effects of yeast expressed recombinant interleukin-2 and interferon-gamma on physiological changes in bovine mammary glands and on bactericidal activity of neutrophils. J Dairy Res. 2000 May;67(2):189-97. PMID: 10840672 [PubMed - indexed for MEDLINE] 56: Jorgensen JB, Lunde H, Jensen L, Whitehead AS, Robertsen B Related Articles, Links Serum amyloid A transcription in Atlantic salmon (Salmo salar L.) hepatocytes is enhanced by stimulation with macrophage factors, recombinant human IL-1 beta, IL-6 and TNF alpha or bacterial lipopolysaccharide. Dev Comp Immunol. 2000 Sep-Oct;24(6-7):553-63. PMID: 10831790 [PubMed - indexed for MEDLINE] 57: Lin Y, Lee H, Berg AH, Lisanti MP, Shapiro L, Scherer PE. Related Articles, Links The lipopolysaccharide-activated toll-like receptor (TLR)-4 induces synthesis of the closely related receptor TLR-2 in adipocytes. J Biol Chem. 2000 Aug 11;275(32):24255-63. PMID: 10823826 [PubMed - indexed for MEDLINE] 58: Roilides E, Katsifa H, Tsaparidou S, Stergiopoulou T, Panteliadis Related Articles, Links C, Walsh TJ. Interleukin 10 suppresses phagocytic and antihyphal activities of human neutrophils. Cytokine. 2000 Apr;12(4):379-87. PMID: 10805220 [PubMed - indexed for MEDLINE] 59: Tang J. Kao PN, Herschman HR. Related Articles, Links Protein-arginine methyltransferase I, the predominant protein-arginine methyltransferase in cells, interacts with and is regulated by interleukin enhancer-binding factor 3. J Biol Chem. 2000 Jun 30;275(26):19866-76. PMID: 10749851 [PubMed - indexed for MEDLINE] 60: Trajkovic V, Stepanovic S, Samardzic T, Jankovic V, Badovinac V, Related Articles, Links Mostarica Stojkovic M. Cryptococcus neoformans neutralizes macrophage and astrocyte derived nitric oxide without interfering with inducible nitric oxide synthase induction or catalytic activity - possible involvement of nitric oxide consumption. Scand J Immunol. 2000 Apr;51(4):384-91. PMID: 10736111 [PubMed - indexed for MEDLINE]

61: Meneacci A, Cenci E, Bacci A, Bistoni F, Romani L.

Related Articles, Links

Host immune reactivity determines the efficacy of combination immunotherapy and antifungal chemotherapy in candidiasis. J Infect Dis. 2000 Feb;181(2):686-94.

PMID: 10669356 [PubMed - indexed for MEDLINE]

Borges WG, Augustine NH, Hill HR.

Related Articles, Links

62: Defective interleukin-12/interferon-gamma pathway in patients with hyperimmunoglobulinemia E syndrome. J Pediatr. 2000 Feb;136(2):176-80. PMID: 10657822 [PubMed - indexed for MEDLINE] 63: Rajagopal K, Sommers CL, Decker DC, Mitchell EO, Korthauer U. Related Articles, Links Sperling Al, Kozak CA, Love PE, Bluestone JA. RIBP, a novel Rlk/Txk- and itk-binding adaptor protein that regulates T cell activation. J Exp Med. 1999 Dec 6;190(11):1657-68. PMID: 10587356 [PubMed - indexed for MEDLINE] 64: Kullberg BJ, Netea MG, Vonk AG, van der Meer JW. Related Articles, Links Modulation of neutrophil function in host defense against disseminated Candida albicans infection in mice. FEMS Immunol Med Microbiol. 1999 Dec;26(3-4):299-307. Review. PMID: 10575142 [PubMed - indexed for MEDLINE] 65: Pietrella D, Monari C, Retini C, Palazzetti B, Kozel TR, Related Articles, Links Vecchiarelli A. HIV type 1 envelope glycoprotein gp120 induces development of a T helper type 2 response to Cryptococcus neoformans. AIDS. 1999 Nov 12;13(16):2197-207. PMID: 10563705 [PubMed - indexed for MEDLINE] 66: Kawakami K, Hossain Qureshi M, Zhang T, Koguchi Y, Xie Q, Related Articles, Links Kurimoto M. Saito A. Interleukin-4 weakens host resistance to pulmonary and disseminated cryptococcal infection caused by combined treatment with interferongamma-inducing cytokines. Cell Immunol. 1999 Oct 10;197(1):55-61. PMID: 10555996 [PubMed - indexed for MEDLINE] 67: Morlino GB, Tizzani L, Fleer R, Frontali L, Bianchi MM. Related Articles, Links Inducible amplification of gene copy number and heterologous protein production in the yeast Kluyveromyces lactis. Appl Environ Microbiol. 1999 Nov;65(11):4808-13. PMID: 10543790 [PubMed - indexed for MEDLINE] 68: Lee J. Choi SI, Jang JS, Jang K, Moon JW, Bae CS, Yang DS, Related Articles, Links Novel secretion system of recombinant Saccharomyces cerevisiae using an N-terminus residue of human IL-1 beta as secretion enhancer. Biotechnol Prog. 1999 Sep-Oct; 15(5):884-90. PMID: 10514258 [PubMed - indexed for MEDLINE] 69: Ohtsubo T, Kamada S, Mikami T, Murakami H, Tsujimoto Y. Related Articles, Links Identification of NRF2, a member of the NF-E2 family of transcription factors, as a substrate for caspase-3(-like) proteases. Cell Death Differ. 1999 Sep;6(9):865-72. PMID: 10510468 [PubMed - indexed for MEDLINE] 70: Rosseau S, Hammerl P, Maus U, Gunther A, Seeger W. Related Articles, Links Grimminger F. Lohmeyer J. Surfactant protein A down-regulates proinflammatory cytokine production

evoked by Candida albicans in human alveolar macrophages and

cb h g e fcg e ch . be

J Immunol. 1999 Oct 15;163(8):4495-502.

monocytes.

h

PMID: 10510392 [PubMed - indexed for MEDLINE]

71: Zhang X, Wrzeszczynska MH, Horvath CM, Darnell JE Jr.

Related Articles, Links



Interacting regions in Stat3 and c-Jun that participate in cooperative transcriptional activation.

Mol Cell Biol. 1999 Oct;19(10):7138-46.

PMID: 10490649 [PubMed - indexed for MEDLINE]

72: Yang X, Chen Y, Gabuzda D.

Related Articles, Links



ERK MAP kinase links cytokine signals to activation of latent HIV-1 infection by stimulating a cooperative interaction of AP-1 and NF-kappaB. J Biol Chem. 1999 Sep 24;274(39):27981-8.

PMID: 10488148 [PubMed - indexed for MEDLINE]

73: Sliva D, Zhu YX, Tsai S, Kamine J, Yang YC.

Related Articles, Links



Tip60 interacts with human interleukin-9 receptor alpha-chain.

Biochem Biophys Res Commun. 1999 Sep 16;263(1):149-55.

PMID: 10486269 [PubMed - indexed for MEDLINE]

74: Kurschner C, Yuzaki M.

Related Articles, Links



Neuronal interleukin-16 (NIL-16): a dual function PDZ domain protein. J Neurosci. 1999 Sep 15;19(18):7770-80.

PMID: 10479680 [PubMed - indexed for MEDLINE]

75: Skowron G, Stein D, Drusano G, Melbourne K, Bilello J, Mikolich Related Articles, Links D, Rana K, Agosti JM, Mongillo A, Whitmore J, Gilbert MJ



The safety and efficacy of granulocyte-macrophage colony-stimulating factor (Sargramostim) added to indinavir- or ritonavir-based antiretroviral therapy: a randomized double-blind, placebo-controlled trial.

J Infect Dis. 1999 Oct;180(4):1064-71.

PMID: 10479132 [PubMed - indexed for MEDLINE]

76: Petit MD, Wassenaar A, van der Velden U, van Eden W, Loos BG. Related Articles, Links



Depressed responsiveness of peripheral blood mononuclear cells to heatshock proteins in periodontitis patients.

J Dent Res. 1999 Aug; 78(8): 1393-400.

PMID: 10439026 [PubMed - indexed for MEDLINE]

77: De Valck D. Jin DY, Hevninck K, Van de Craen M, Contreras R. Related Articles, Links Fiers W, Jeang KT, Beyaert R.



The zinc finger protein A20 interacts with a novel anti-apoptotic protein which is cleaved by specific caspases.

Oncogene. 1999 Jul 22; 18(29):4182-90.

PMID: 10435631 [PubMed - indexed for MEDLINE]

78: Moritz RL, Ward LD, Tu GF, Fabri LJ, Ji H, Yasukawa K, Simpson RJ

Related Articles, Links



The N-terminus of gp130 is critical for the formation of the high-affinity interleukin-6 receptor complex.

Growth Factors. 1999;16(4):265-78.

PMID: 10427501 [PubMed - indexed for MEDLINE]

79: Balland A, Mahan-Boyce JA, Krasts DA, Daniels M, Wang W, Gombotz WR.

Related Articles, Links



Characterization of the isoforms of PIXY321, a granulocyte-macrophage-colony stimulating factor-interleukin-3 fusion protein, separated by preparative isoelectric focusing on immobilized pH gradients.

b e

J Chromatogr A. 1999 Jun 18;846(1-2):143-56.

PMID: 10420606 [PubMed - indexed for MEDLINE]

1 80: Kawakami K, Qureshi MH, Zhang T, Koguchi Y, Shibuya K, Naoe Related Articles, Links S. Saito A. Interferon-gamma (IFN-gamma)-dependent protection and synthesis of chemoattractants for mononuclear leucocytes caused by IL-12 in the lungs of mice infected with Cryptococcus neoformans. Clin Exp Immunol. 1999 Jul;117(1):113-22. PMID: 10403924 [PubMed - indexed for MEDLINE] **81:** Tao W, Walke DW, Morgan JL Related Articles, Links Oligomerized Ced-4 kills budding yeast through a caspase-independent mechanism. Biochem Biophys Res Commun. 1999 Jul 14;260(3):799-805. PMID: 10403845 [PubMed - indexed for MEDLINE] 82: Romero F, Martinez-A C, Camonis J, Rebollo A. Related Articles, Links Aiolos transcription factor controls cell death in T cells by regulating Bcl-2 expression and its cellular localization. EMBO J. 1999 Jun 15;18(12):3419-30. PMID: 10369681 [PubMed - indexed for MEDLINE] 83: Schuh JC, Morrissey PJ. Related Articles, Links Development of a recombinant growth factor and fusion protein: lessons from GM-CSF. Toxicol Pathol. 1999 Jan-Feb;27(1):72-7. Review. PMID: 10367677 [PubMed - indexed for MEDLINE] 1 84: Pflanz S, Tacken I, Grotzinger J, Jacques Y, Minvielle S, Dahmen Related Articles, Links H, Heinrich PC, Muller-Newen G. A fusion protein of interleukin-11 and soluble interleukin-11 receptor acts as a superagonist on cells expressing gp130. FEBS Lett. 1999 Apr 30;450(1-2):117-22. Erratum in: FEBS Lett 1999 Jul 2;454(1-2):172. PMID: 10350068 [PubMed - indexed for MEDLINE] 85: Chinen T, Qureshi MH, Koguchi Y, Kawakami K. Related Articles, Links Candida albicans suppresses nitric oxide (NO) production by interferongamma (IFN-gamma) and lipopolysaccharide (LPS)-stimulated murine peritoneal macrophages. Clin Exp Immunol. 1999 Mar;115(3):491-7. PMID: 10193423 [PubMed - indexed for MEDLINE] 86: Bae CS, Yang DS, Chang KR, Seong BL, Lee J. Related Articles, Links Enhanced secretion of human granulocyte colony-stimulating factor directed by a novel hybrid fusion peptide from recombinant Saccharomyces cerevisiae at high cell concentration. Biotechnol Bioeng. 1998 Mar 5;57(5):600-9. PMID: 10099239 [PubMed - indexed for MEDLINE] 87: Zhu M, John S, Berg M, Leonard WJ. Related Articles, Links Functional association of Nmi with Stat5 and Stat1 in IL-2- and IFNgamma-mediated signaling. Cell. 1999 Jan 8;96(1):121-30. PMID: 9989503 [PubMed - indexed for MEDLINE] 88: Retini C, Casadevall A, Pietrella D, Monari C, Palazzetti B, Related Articles, Links Vecchiarelli A. Specific activated T cells regulate IL-12 production by human monocytes

h

stimulated with Cryptococcus neoformans.

h

cb

h g

е

Related Articles, Links

J Immunol. 1999 Feb 1;162(3):1618-23. PMID: 9973421 [PubMed - indexed for MEDLINE] 89: Zhou L. Wang J, Peng S, Duan J, Cai X, Zou M, Su O. Related Articles, Links High-level expression of human interleukin-17 in the yeast Pichia pastoris. Biochem Mol Biol Int. 1998 Dec;46(6):1109-16. PMID: 9891843 [PubMed - indexed for MEDLINE] 90: Burudi EM, Riese S, Stahl PD, Regnier-Vigouroux A Related Articles, Links Identification and functional characterization of the mannose receptor in astrocytes. Glia. 1999 Jan; 25(1): 44-55. PMID: 9888297 [PubMed - indexed for MEDLINE] 91: Cho BK, Kieke MC, Boder ET, Wittrup KD, Kranz DM. Related Articles, Links A yeast surface display system for the discovery of ligands that trigger cell activation. J Immunol Methods. 1998 Nov 1;220(1-2):179-88. PMID: 9839939 [PubMed - indexed for MEDLINE] 92: Van Crickinge W, van Gurp M, Decoster E, Schotte P, Van de Related Articles, Links Craen M. Fiers W, Vandenabeele P, Bevaert R. Use of the yeast three-hybrid system as a tool to study caspases. Anal Biochem. 1998 Oct 1;263(1):62-6. PMID: 9750144 [PubMed - indexed for MEDLINE] 93: Gram H. Schmitz R. Ridder R. Related Articles, Links Secretion of scFv antibody fragments. Methods Mol Biol. 1998;103:179-92. No abstract available. PMID: 9680640 [PubMed - indexed for MEDLINE] 1 94: Arancia G, Stringaro A, Crateri P, Torosantucci A, Ramoni C, Related Articles, Links Urbani F, Ausiello CM, Cassone A. Interaction between human interleukin-2-activated natural killer cells and heat-killed germ tube forms of Candida albicans. Cell Immunol. 1998 May 25;186(1):28-38. PMID: 9637762 [PubMed - indexed for MEDLINE] 95: Ridder R, Schmitz R, Legay F, Gram H. Related Articles, Links Generation of rabbit monoclonal antibody fragments from a combinatorial phage display library and their production in the yeast Pichia pastoris. Biotechnology (N Y). 1995 Mar; 13(3):255-60. PMID: 9634767 [PubMed - indexed for MEDLINE] 7 96: Musso T. Calosso L. Zucca M. Millesimo M. Puliti M. Bulfone-Related Articles, Links Paus S. Merlino C. Savoia D. Cavallo R. Ponzi AN, Badolato R. Interleukin-15 activates proinflammatory and antimicrobial functions in polymorphonuclear cells. Infect Immun. 1998 Jun;66(6):2640-7. PMID: 9596728 [PubMed - indexed for MEDLINE] 97: van der Laken CJ, Boerman OC, Oyen WJ, Laverman P, van de Related Articles, Links Ven MT, Corstens FH, van der Meer JW. In vivo expression of interleukin-1 receptors during various experimentally induced inflammatory conditions.

PMID: 9593033 [PubMed - indexed for MEDLINE]

98: Zanetta JP. Bonaly R, Maschke S, Strecker G, Michalski JC.

e ch

b e

J Infect Dis. 1998 May; 177(5):1398-401.

e fcg



Differential binding of lectins IL-2 and CSL to candida albicans and cancer

Glycobiology. 1998 Mar;8(3):221-5.

PMID: 9451031 [PubMed - indexed for MEDLINE]

1 99: Bromuro C. La Valle R, Sandini S, Urbani F, Ausiello CM, Morelli Related Articles, Links L, Fe d'Ostiani C, Romani L, Cassone A



A 70-kilodalton recombinant heat shock protein of Candida albicans is highly immunogenic and enhances systemic murine candidiasis. Infect Immun. 1998 May;66(5):2154-62.

PMID: 9573102 [PubMed - indexed for MEDLINE]

100: Saltzman A, Searfoss G, Marcireau C, Stone M, Ressner R. Related Articles, Links Munro R, Franks C, D'Alonzo J, Tocque B, Jaye M, Ivashchenko <u>Y</u>..



hUBC9 associates with MEKK1 and type I TNF-alpha receptor and stimulates NFkappaB activity.

FEBS Lett. 1998 Apr 3;425(3):431-5.

PMID: 9563508 [PubMed - indexed for MEDLINE]

101: Lavigne LM, Schopf LR, Chung CL, Maylor R, Sypek JP. Related Articles, Links



The role of recombinant murine IL-12 and IFN-gamma in the pathogenesis of a murine systemic Candida albicans infection.

J Immunol. 1998 Jan 1;160(1):284-92.

PMID: 9551982 [PubMed - indexed for MEDLINE]

102: Kawakami K, Qureshi MH, Zhang T, Okamura H, Kurimoto M, Related Articles, Links Saito A.



IL-18 protects mice against pulmonary and disseminated infection with Cryptococcus neoformans by inducing IFN-gamma production.

J Immunol. 1997 Dec 1;159(11):5528-34.

PMID: 9548493 [PubMed - indexed for MEDLINE]

103: Murphy KP Jr, Gagne P, Pazmany C, Moody MD.

Related Articles, Links



Expression of human interleukin-17 in Pichia pastoris: purification and characterization.

Protein Expr Purif. 1998 Mar; 12(2):208-14.

PMID: 9518462 [PubMed - indexed for MEDLINE]

104: Balland A. Krasts DA, Hoch KL, Gerhart MJ, Stremler KE, Related Articles, Links Waugh SM.



Characterization of the microheterogeneities of PIXY321, a genetically engineered granulocyte-macrophage colony-stimulating factor/interleukin-3 fusion protein expressed in yeast.

Eur J Biochem. 1998 Feb 1;251(3):812-20.

PMID: 9490056 [PubMed - indexed for MEDLINE]

105: Volpe F, Clatworthy J, Kaptein A, Maschera B, Griffin AM, Ray Related Articles, Links <u>K.</u>



The IL1 receptor accessory protein is responsible for the recruitment of the interleukin-1 receptor associated kinase to the IL1/IL1 receptor I complex.

FEBS Lett. 1997 Dec 8;419(1):41-4.

PMID: 9426216 [PubMed - indexed for MEDLINE]

106: Raghavachar A, Ganser A, Freund M, Heimpel H, Hermann F, Related Articles, Links Schrezenmeier H.



Long-term interleukin-3 and intensive immunosuppression in the treatment of aplastic anemia.

Cytokines Mol Ther. 1996 Dec;2(4):215-23.

PMID: 9384707 [PubMed - indexed for MEDLINE]

107: Cameron AM, Nucifora FC Jr, Fung ET, Livingston DJ, Aldape Related Articles, Links RA, Ross CA, Snyder SH.



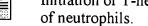
FKBP12 binds the inositol 1,4,5-trisphosphate receptor at leucine-proline (1400-1401) and anchors calcineurin to this FK 506-like domain

J Biol Chem. 1997 Oct 31;272(44):27582-8.

PMID: 9346894 [PubMed - indexed for MEDLINE]

108: Romani L, Bistoni F, Puccetti P.

Related Articles, Links



Initiation of T-helper cell immunity to Candida albicans by IL-12: the role

Chem Immunol. 1997;68:110-35. Review.

PMID: 9329219 [PubMed - indexed for MEDLINE]

109: Hamon Y, Luciani MF, Becq F, Verrier B, Rubartelli A, Chimini Related Articles, Links



Interleukin-1beta secretion is impaired by inhibitors of the Atp binding cassette transporter, ABC1.

Blood. 1997 Oct 15;90(8):2911-5.

PMID: 9376570 [PubMed - indexed for MEDLINE]

110: Noguchi M. Sarin A, Aman MJ, Nakajima H, Shores EW, Related Articles, Links Henkart PA, Leonard WJ.



Functional cleavage of the common cytokine receptor gamma chain (gammac) by calpain.

Proc Natl Acad Sci U S A. 1997 Oct 14;94(21):11534-9. PMID: 9326644 [PubMed - indexed for MEDLINE]

111: Sun J, Bottomley SP, Kumar S, Bird PI.

Related Articles, Links



Recombinant caspase-3 expressed in Pichia pastoris is fully activated and kinetically indistinguishable from the native enzyme.

Biochem Biophys Res Commun. 1997 Sep 29;238(3):920-4. PMID: 9325193 [PubMed - indexed for MEDLINE]

112: Zhang JG, Owczarek CM, Ward LD, Howlett GJ, Fabri LJ, Roberts BA, Nicola NA.

Related Articles, Links



Evidence for the formation of a heterotrimeric complex of leukaemia inhibitory factor with its receptor subunits in solution.

Biochem J. 1997 Aug 1;325 (Pt 3):693-700.

PMID: 9271090 [PubMed - indexed for MEDLINE]

113: Nagira M, Imai T, Hieshima K, Kusuda J, Ridanpaa M, Takagi S. Related Articles, Links Nishimura M, Kakizaki M, Nomiyama H, Yoshie O.



Molecular cloning of a novel human CC chemokine secondary lymphoidtissue chemokine that is a potent chemoattractant for lymphocytes and mapped to chromosome 9p13.

J Biol Chem. 1997 Aug 1;272(31):19518-24.

PMID: 9235955 [PubMed - indexed for MEDLINE]

114: Endo TA, Masuhara M, Yokouchi M, Suzuki R, Sakamoto H, Related Articles, Links Mitsui K, Matsumoto A, Tanimura S, Ohtsubo M, Misawa H, Miyazaki T, Leonor N, Taniguchi T, Fujita T, Kanakura Y, Komiya S, Yoshimura A.



A new protein containing an SH2 domain that inhibits JAK kinases.

Nature. 1997 Jun 26;387(6636):921-4.

PMID: 9202126 [PubMed - indexed for MEDLINE]

115: Ambrosino C, Ruocco MR, Chen X, Mallardo M, Baudi F. Trematerra S. Quinto I. Venuta S. Scala G.

Related Articles, Links



HIV-1 Tat induces the expression of the interleukin-6 (IL6) gene by binding to the IL6 leader RNA and by interacting with CAAT enhancer-binding protein beta (NF-IL6) transcription factors.

J Biol Chem. 1997 Jun 6;272(23):14883-92.

PMID: 9169458 [PubMed - indexed for MEDLINE]

116: Ng KH, Aldwell FE, Wedlock DN, Watson JD, Buddle BM.

Related Articles, Links

Antigen-induced interferon-gamma and interleukin-2 responses of cattle inoculated with Mycobacterium bovis.

Vet Immunol Immunopathol. 1997 Jun;57(1-2):59-68. PMID: 9239838 [PubMed - indexed for MEDLINE]

117: Yamamoto Y, Klein TW, Tomioka M, Friedman H.

Related Articles, Links



Differential effects of granulocyte/macrophage colony-stimulating factor (GM-CSF) in enhancing macrophage resistance to Legionella pneumophila vs Candida albicans.

Cell Immunol. 1997 Feb 25;176(1):75-81.

PMID: 9070320 [PubMed - indexed for MEDLINE]

118: Masure S, Paemen L, Van Aelst I, Fiten P, Proost P, Billiau A, Van Damme J, Opdenakker G.

Related Articles, Links



Production and characterization of recombinant active mouse gelatinase B from eukaryotic cells and in vivo effects after intravenous administration. Eur J Biochem. 1997 Feb 15;244(1):21-30.

PMID: 9063441 [PubMed - indexed for MEDLINE]

119: Shliapnikov SA, Bubnova N, Eriukhin IA.

Related Articles, Links



[The principle of cytokine therapy in the sepsis syndrome (a preliminary report)]

Vestn Khir Im I I Grek. 1997;156(2):51-4. Russian. PMID: 9235767 [PubMed - indexed for MEDLINE]

120: Kamiya T, Sugio S, Yamanouchi K, Kagitani Y.

Related Articles, Links



Secretion of active Fc fragments of immunoglobulin E directed by the yeast invertase signal sequence in mammalian cells. Tohoku J Exp Med. 1996 Dec;180(4):297-308.

PMID: 9130368 [PubMed - indexed for MEDLINE]

121: Kawakami K, Qifeng X, Tohyama M, Qureshi MH, Saito A.

Related Articles, Links



Contribution of tumour necrosis factor-alpha (TNF-alpha) in host defence mechanism against Cryptococcus neoformans.

Clin Exp Immunol. 1996 Dec;106(3):468-74. PMID: 8973614 [PubMed - indexed for MEDLINE]

122: Webb JR, Kaufmann D, Campos-Neto A, Reed SG.

Related Articles, Links



Molecular cloning of a novel protein antigen of Leishmania major that elicits a potent immune response in experimental murine leishmaniasis.

J Immunol. 1996 Dec 1;157(11):5034-41.

PMID: 8943412 [PubMed - indexed for MEDLINE]

123: Vollmer P. Peters M. Ehlers M. Yagame H. Matsuba T. Kondo M. Related Articles, Links Yasukawa K. Buschenfelde KH. Rose-John S.



Yeast expression of the cytokine receptor domain of the soluble interleukin-6 receptor.

J Immunol Methods. 1996 Nov 29;199(1):47-54. PMID: 8960097 [PubMed - indexed for MEDLINE]

124: Sun J, Bird CH, Sutton V, McDonald L, Coughlin PB, De Jong TA, Trapani JA, Bird PI.

Related Articles, Links

h

cb hg e e e fcg

e ch

b e



A cytosolic granzyme B inhibitor related to the viral apoptotic regulator cytokine response modifier A is present in cytotoxic lymphocytes.

J Biol Chem. 1996 Nov 1;271(44):27802-9.

PMID: 8910377 [PubMed - indexed for MEDLINE]

125: <u>Van Criekinge W, Beyaert R, Van de Craen M, Vandenabcele P, Schotte P, De Valck D, Fiers W.</u>
Related Articles, Links



Functional characterization of the prodomain of interleukin-lbeta-converting enzyme.

J Biol Chem. 1996 Nov 1;271(44):27245-8.

PMID: 8910297 [PubMed - indexed for MEDLINE]

126: Brunn GJ, Williams J, Sabers C, Wiederrecht G, Lawrence JC Jr. Related Articles, Links Abraham RT.



Direct inhibition of the signaling functions of the mammalian target of rapamycin by the phosphoinositide 3-kinase inhibitors, wortmannin and LY294002.

EMBO J. 1996 Oct 1;15(19):5256-67.

PMID: 8895571 [PubMed - indexed for MEDLINE]

127: <u>Uherova P. Connick E. MaWhinney S. Schlichtemeier R.</u> Schooley RT, Kuritzkes DR.

Related Articles, Links



In vitro effect of interleukin-12 on antigen-specific lymphocyte proliferative responses from persons infected with human immunodeficiency virus type 1.

J Infect Dis. 1996 Sep; 174(3):483-9.

PMID: 8769604 [PubMed - indexed for MEDLINE]

128: Li B, Ouyang B, Pan H, Reissmann PT, Slamon DJ, Arceci R, Lu Related Articles, Links L, Dai W.



Prk, a cytokine-inducible human protein serine/threonine kinase whose expression appears to be down-regulated in lung carcinomas.

J Biol Chem. 1996 Aug 9;271(32):19402-8.

PMID: 8702627 [PubMed - indexed for MEDLINE]

129: Gulav Z, Imir T.

Related Articles, Links



Anti-candidial activity of natural killer (NK) and lymphokine activated killer (LAK) lymphocytes in vitro.

Immunobiology. 1996 Jul; 195(2):220-30.

PMID: 8877398 [PubMed - indexed for MEDLINE]

130: Peters BG, Adkins DR, Harrison BR, Velasquez WS, Dunphy FR, Related Articles, Links Petruska PJ, Bowers CE, Niemeyer R, McIntyre W, Vrahnos D, Auberry SE, Spitzer G.



Antifungal effects of yeast-derived rhu-GM-CSF in patients receiving high-dose chemotherapy given with or without autologous stem cell transplantation: a retrospective analysis.

Bone Marrow Transplant. 1996 Jul;18(1):93-102. Review.

PMID: 8832001 [PubMed - indexed for MEDLINE]

131: Hughes B, Howat D, Lisle H, Holbrook M, James T, Gozzard N, Blease K, Hughes P, Kingaby R, Warrellow G, Alexander R, Head J, Boyd E, Eaton M, Perry M, Wales M, Smith B, Owens R, Catterall C, Lumb S, Russell A, Allen R, Merriman M, Bloxham D, Higgs G.



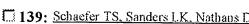
The inhibition of antigen-induced eosinophilia and bronchoconstriction by CDP840, a novel stereo-selective inhibitor of phosphodiesterase type 4. Br J Pharmacol. 1996 Jul;118(5):1183-91.

PMID: 8818342 [PubMed - indexed for MEDLINE]

Harrison TS, Levitz SM.

Related Articles, Links

□ 132: Role of IL-12 in peripheral blood mononuclear cell responses to fungi in persons with and without HIV infection. J Immunol. 1996 Jun 1;156(11):4492-7. PMID: 8666825 [PubMed - indexed for MEDLINE] 133: Tascini C, Baldelli F, Monari C, Retini C, Pietrella D, Francisci Related Articles, Links D. Bistoni F, Vecchiarelli A. Inhibition of fungicidal activity of polymorphonuclear leukocytes from HIV-infected patients by interleukin (IL)-4 and IL-10. AIDS. 1996 May; 10(5):477-83. PMID: 8724038 [PubMed - indexed for MEDLINE] 134: Parnet P. Garka KE, Bonnert TP. Dower SK, Sims JE. Related Articles, Links IL-1Rrp is a novel receptor-like molecule similar to the type I interleukin-1 receptor and its homologues T1/ST2 and IL-1R AcP. J Biol Chem. 1996 Feb 23;271(8):3967-70. PMID: 8626725 [PubMed - indexed for MEDLINE] 135: Druev KM, Blumer KJ, Kang VH, Kehrl JH. Related Articles, Links Inhibition of G-protein-mediated MAP kinase activation by a new mammalian gene family. Nature. 1996 Feb 22;379(6567):742-6. PMID: 8602223 [PubMed - indexed for MEDLINE] 136: Atamas SP, Choi J, Yurovsky VV, White B. Related Articles, Links An alternative splice variant of human IL-4, IL-4 delta 2, inhibits IL-4stimulated T cell proliferation. J Immunol. 1996 Jan 15;156(2):435-41. PMID: 8543791 [PubMed - indexed for MEDLINE] 137: Jiang H, Lin JJ, Su ZZ, Goldstein NI, Fisher PB. Related Articles, Links Subtraction hybridization identifies a novel melanoma differentiation associated gene, mda-7, modulated during human melanoma differentiation, growth and progression. Oncogene. 1995 Dec 21;11(12):2477-86. PMID: 8545104 [PubMed - indexed for MEDLINE] 138: Froelich-Ammon SJ, Burden DA, Patchan MW, Elsea SH, Related Articles, Links Thompson RB, Osheroff N. Increased drug affinity as the mechanistic basis for drug hypersensitivity of a mutant type II topoisomerase. J Biol Chem. 1995 Nov 24;270(47):28018-21. PMID: 7499285 [PubMed - indexed for MEDLINE] 139: Schaefer TS, Sanders LK, Nathans D. Related Articles, Links Cooperative transcriptional activity of Jun and Stat3 beta, a short form of Stat3.



Proc Natl Acad Sci U S A. 1995 Sep 26;92(20):9097-101. PMID: 7568080 [PubMed - indexed for MEDLINE]

140: Sedlak TW, Oltvai ZN, Yang E, Wang K, Boise LH, Thompson Related Articles, Links CB, Korsmeyer SJ.

Multiple Bcl-2 family members demonstrate selective dimerizations with

Proc Natl Acad Sci U S A. 1995 Aug 15;92(17):7834-8. PMID: 7644501 [PubMed - indexed for MEDLINE]

h cb h g e fcg e ch b e

141: Zhang X, Huang B, Cai L. Related Articles, Links [Interleukin-2 gene cloning and expression in S. cerevisiae] Zhongguo Yi Xue Ke Xue Yuan Xue Bao. 1995 Aug;17(4):274-80. Chinese. PMID: 8575049 [PubMed - indexed for MEDLINE] 142: Aubert A, Vega C, Dantzer R, Goodall G. Related Articles, Links Pyrogens specifically disrupt the acquisition of a task involving cognitive processing in the rat. Brain Behav Immun. 1995 Jun;9(2):129-48. PMID: 7549036 [PubMed - indexed for MEDLINE] 143: Stowers L. Yelon D. Berg L.J. Chant J. Related Articles, Links Regulation of the polarization of T cells toward antigen-presenting cells by Ras-related GTPase CDC42. Proc Natl Acad Sci U S A. 1995 May 23;92(11):5027-31. PMID: 7761442 [PubMed - indexed for MEDLINE]. 144: Beno DW, Stover AG, Mathews HL. Related Articles, Links Growth inhibition of Candida albicans hyphae by CD8+ lymphocytes. J Immunol. 1995 May 15;154(10):5273-81. PMID: 7730631 [PubMed - indexed for MEDLINE] 145: Krupnova OF, Sizova NI, Smolianitskii AG. Related Articles, Links [Increase in the yield of recombinant proteins in Saccharomyces cerevisiae yeasts as a result of optimizing their culture conditions] Prikl Biokhim Mikrobiol. 1995 May-Jun;31(3):311-5. Russian. PMID: 7638157 [PubMed - indexed for MEDLINE] 146: Ebrahimi B. Roy DJ, Bird P, Sargan DR. Related Articles, Links Cloning, sequencing and expression of the ovine interleukin 6 gene. Cytokine. 1995 Apr;7(3):232-6. PMID: 7640342 [PubMed - indexed for MEDLINE] 147: Bujdoso R. Williamson M. Roy D. Hunt P. Blacklaws B. Sargan Related Articles, Links D. McConnell I. Molecular cloning and expression of DNA encoding ovine interleukin 2. Cytokine. 1995 Apr;7(3):223-31. PMID: 7543777 [PubMed - indexed for MEDLINE] 148: Grinev MV, Tsibin IuN, Tarelkina MN, Gromov MI, Shirokov Related Articles, Links DM, Pivovarova LP, Frolov GM, Razumova NK, Masiianskaia TI, Ariskina OB. [A first trial of the use of human recombinant interleukin (rIL-2) in patients with tumorous diseases] Vestn Khir Im I I Grek. 1995;154(2):57-60. Russian. PMID: 8540190 [PubMed - indexed for MEDLINE] 149: Hammerling U, Kroon R, Sjodin L. Related Articles, Links In vitro bioassay with enhanced sensitivity for human granulocyte colonystimulating factor. J Pharm Biomed Anal. 1995 Jan; 13(1):9-20. PMID: 7536474 [PubMed - indexed for MEDLINE] 150: Romani L, Mencacci A, Tonnetti L, Spaccapelo R, Cenci E, Related Articles, Links Puccetti P. Wolf SF, Bistoni F. IL-12 is both required and prognostic in vivo for T helper type 1 differentiation in murine candidiasis. J Immunol. 1994 Dec 1;153(11):5167-75.

h cb hgeeefcg ech be

PMID: 7963574 [PubMed - indexed for MEDLINE] 151: Grinev MV, Gromov MI, Tsibin IuN, Tarelkina MN, Shirokov Related Articles, Links DM, Pivovarova LP, Razumova NK, Masilianskaia TI, Ariskina OB, Guida OG. [Interleukin-1 in combined detoxification therapy of surgical sepsis] Anesteziol Reanimatol. 1994 Nov-Dec;(6):25-8. Russian. PMID: 7733474 [PubMed - indexed for MEDLINE] 152: Cottrez F, Auriault C, Capron A, Kusznier JP, Groux H. Related Articles, Links Murine interleukin-4 production with baculovirus: an easy and rapid method for a small scale production of functional interleukins. Eur Cytokine Netw. 1994 Sep-Oct;5(5):481-7. PMID: 7880979 [PubMed - indexed for MEDLINE] 153: Bui T. Dykers T. Hu SL, Faltynek CR, Ho RJ Related Articles, Links Effect of MTP-PE liposomes and interleukin-7 on induction of antibody and cell-mediated immune responses to a recombinant HIV-envelope protein. J Acquir Immune Defic Syndr. 1994 Aug;7(8):799-806. PMID: 8021814 [PubMed - indexed for MEDLINE] 154: Puccetti P, Mencacci A, Cenci E, Spaccapelo R, Mosci P, Enssle Related Articles, Links KH, Romani L, Bistoni F Cure of murine candidiasis by recombinant soluble interleukin-4 receptor. J Infect Dis. 1994 Jun; 169(6):1325-31. PMID: 8195611 [PubMed - indexed for MEDLINE] 155: Scaringi L. Cornacchione P. Rosati E, Fettucciari K, Rossi R, Related Articles, Links Marconi P. Induction and persistence in vivo of NK/LAK activity by a mannoprotein component of Candida albicans cell wall. Cell Immunol. 1994 May; 155(2):265-82. PMID: 8181065 [PubMed - indexed for MEDLINE] 156: Blondeau K, Boutur O, Boze H, Jung G, Moulin G, Galzy P. Related Articles, Links Development of high-cell-density fermentation for heterologous interleukin 1 beta production in Kluyveromyces lactis controlled by the PHO5 promoter. Appl Microbiol Biotechnol. 1994 May;41(3):324-9. PMID: 7764967 [PubMed - indexed for MEDLINE] 157: Blasi E, Pitzurra L, Bartoli A, Puliti M, Bistoni F. Related Articles, Links Tumor necrosis factor as an autocrine and paracrine signal controlling the macrophage secretory response to Candida albicans. Infect Immun. 1994 Apr;62(4):1199-206. PMID: 8132326 [PubMed - indexed for MEDLINE] 158: Pottratz ST, Bellido T, Mocharla H, Crabb D, Manolagas SC. Related Articles, Links 17 beta-Estradiol inhibits expression of human interleukin-6 promoterreporter constructs by a receptor-dependent mechanism. J Clin Invest. 1994 Mar; 93(3):944-50. PMID: 8132780 [PubMed - indexed for MEDLINE] 159: Sjogren-Jansson E. Gustafsson C, Jeansson S, Karlsson U, Lycke Related Articles, Links Production of large amounts of recombinant interleukins by cDNA

transfected mouse myeloma cells cultured in dialysis tubing.

J Immunol Methods. 1994 Jan 12;168(1):131-6.

PMID: 8288889 [PubMed - indexed for MEDLINE] 160: Lyman SD, James L, Vanden Bos T, de Vries P, Brasel K, Gliniak Related Articles, Links B, Hollingsworth LT, Picha KS, McKenna HJ, Spleti RR, et al. Molecular cloning of a ligand for the flt3/flk-2 tyrosine kinase receptor: a proliferative factor for primitive hematopoietic cells. Cell. 1993 Dec 17;75(6):1157-67. PMID: 7505204 [PubMed - indexed for MEDLINE] 161: Broekhuijsen MP, Mattern IE, Contreras R, Kinghorn JR, van den Related Articles, Links Hondel CA. Secretion of heterologous proteins by Aspergillus niger: production of active human interleukin-6 in a protease-deficient mutant by KEX2-like processing of a glucoamylase-hIL6 fusion protein. J Biotechnol. 1993 Nov;31(2):135-45. PMID: 7764298 [PubMed - indexed for MEDLINE] 162: Roseff SA, Levitz SM. Related Articles, Links Effect of endothelial cells on phagocyte-mediated anticryptococcal activity. Infect Immun. 1993 Sep;61(9):3818-24. PMID: 8359903 [PubMed - indexed for MEDLINE] 163: Cenci E. Romani L. Mencacci A, Spaccapelo R, Schiaffella E. Related Articles, Links Puccetti P, Bistoni F. Interleukin-4 and interleukin-10 inhibit nitric oxide-dependent macrophage killing of Candida albicans. Eur J Immunol. 1993 May;23(5):1034-8. PMID: 8477799 [PubMed - indexed for MEDLINE] 164: Cassatella MA. Guasparri I, Ceska M, Bazzoni F, Rossi F. Related Articles, Links Interferon-gamma inhibits interleukin-8 production by human polymorphonuclear leucocytes. Immunology. 1993 Feb;78(2):177-84. PMID: 8473010 [PubMed - indexed for MEDLINE] 165: Reiner G, Ronneberger H, Hintz-Obertreis P. Related Articles, Links Comparative toxicity of Escherichia coli and yeast rHuIL-3 in cynomolgus and rhesus monkeys. Int Rev Exp Pathol. 1993;34 Pt A:119-47. No abstract available. PMID: 8454411 [PubMed - indexed for MEDLINE] 166: Altamura M, Potenza MA, Geronimo MG, Gandini L. De Simone Related Articles, Links C. Lenzi A, Antonaci S, Jirillo E. Supplementation of male inhibitory material to lipid A activated human mononuclear cell supernatants contributes to the suppression of polymorphonuclear cell phagocytosis. Microbios. 1993;76(308):181-7. PMID: 8302199 [PubMed - indexed for MEDLINE] 167: Sakata T, Iwagami S, Tsuruta Y, Teraoka H, Suzuki S, Suzuki R. Related Articles, Links Role of colony-stimulating factor-1 in macrophage activation in tumor-bearing mice. J Immunol. 1992 Dec 15;149(12):4002-8. PMID: 1281198 [PubMed - indexed for MEDLINE] 168: Fiskerstrand CE, Roy DJ, Green I, Sargan DR. Related Articles, Links Cloning, expression and characterization of ovine interleukins 1 alpha and

b e

h cb hg e e e fcg e ch

beta.

Cytokine. 1992 Nov;4(6):418-28.

PMID: 1292627 [PubMed - indexed for MEDLINE]

169: Enelow RI, Sullivan GW, Carper HT, Mandell GL.

Related Articles, Links

Cytokine-induced human multinucleated giant cells have enhanced candidacidal activity and oxidative capacity compared with macrophages. J Infect Dis. 1992 Sep;166(3):664-8.

PMID: 1500756 [PubMed - indexed for MEDLINE]

170: Fabian I, Lass M, Kletter Y, Golde DW.

Relaied Articles, Links



Differentiation and functional activity of human eosinophilic cells from an eosinophil HL-60 subline: response to recombinant hematopoietic growth factors.

Blood. 1992 Aug 1;80(3):788-94. Erratum in: Blood 1992 Dec 1;80(11):2952.

PMID: 1379088 [PubMed - indexed for MEDLINE]

171: Cunningham-Rundles C, Mayer L. Sapira E, Mendelsohn L.

Related Articles, Links



Restoration of immunoglobulin secretion in vitro in common variable immunodeficiency by in vivo treatment with polyethylene glycol-conjugated human recombinant interleukin-2.

Clin Immunol Immunopathol. 1992 Jul;64(1):46-56. PMID: 1606751 [PubMed - indexed for MEDLINE]

172: Powers R, Garrett DS, March CJ, Frieden EA, Gronenborn AM, Clore GM. Related Articles, Links



1H, 15N, 13C, and 13CO assignments of human interleukin-4 using three-dimensional double- and triple-resonance heteronuclear magnetic resonance spectroscopy.

Biochemistry. 1992 May 5;31(17):4334-46.

PMID: 1567880 [PubMed - indexed for MEDLINE]

173: Shiozaki H, Ide T, Nakao J, Imamura T, Nakamura M, Shimada Related Articles, Links K, Miura Y, Suda T.



Suppressive effect of LD78 on the proliferation of human hemopoietic progenitors.

Jpn J Cancer Res. 1992 May;83(5):499-504.

PMID: 1618701 [PubMed - indexed for MEDLINE]

174: Dean JH, Cornacoff JB, Barbolt TA, Gossett KA, LaBrie T. Related Articles, Links



Pre-clinical toxicity of IL-4: a model for studying protein therapeutics. Int J Immunopharmacol. 1992 Apr;14(3):391-7. Review.

PMID: 1618593 [PubMed - indexed for MEDLINE]

175: Bocchini V, Mazzolla R, Barluzzi R, Blasi E, Sick P, Kettenmann Related Articles, Links H.



An immortalized cell line expresses properties of activated microglial cells.

J Neurosci Res. 1992 Apr;31(4):616-21.

PMID: 1578513 [PubMed - indexed for MEDLINE]

176: Beno DW, Mathews HL.

Related Articles, Links



Growth inhibition of Candida albicans by interleukin-2-activated splenocytes.

Infect Immun. 1992 Mar;60(3):853-63.

PMID: 1541559 [PubMed - indexed for MEDLINE]

177: Willson TA, Metcalf D, Gough NM.

Related Articles, Links



Cross-species comparison of the sequence of the leukaemia inhibitory

h

factor gene and its protein.

Eur J Biochem. 1992 Feb 15;204(1):21-30.

PMID: 1740132 [PubMed - indexed for MEDLINE]

178: Scaringi L, Rosati E, Cornacchione P, Rossi R, Marconi P. Related Articles, Links

In vivo modulation of lymphokine-activated killer cell activity by cell wall components of Candida albicans.

Cell Immunol. 1992 Feb;139(2):438-54.

PMID: 1733513 [PubMed - indexed for MEDLINE]

179: Fabian I, Kletter Y. Mor S, Geller-Bernstein C, Ben-Yaakov M. Related Articles, Links Volovitz B, Golde DW.

Activation of human eosinophil and neutrophil functions by haematopoietic growth factors: comparisons of IL-1, IL-3, IL-5 and GM-CSF.

Br J Haematol. 1992 Feb;80(2):137-43.

PMID: 1550768 [PubMed - indexed for MEDLINE]

180: Clements JM, Craig S, Gearing AJ, Hunter MG, Heyworth CM, Dexter TM, Lord BI.

Biological and structural properties of MIP-1 alpha expressed in yeast. Cytokine. 1992 Jan;4(1):76-82.

PMID: 1617159 [PubMed - indexed for MEDLINE]

181: Degrassi A, Mariani E, Honorati MC, Roda P, Miniero R, Capelli Related Articles, Links M, Facchini A.

Cellular response and anti-HBs synthesis in vitro after vaccination with yeast-derived recombinant hepatitis vaccine.

Vaccine. 1992;10(9):617-22.

PMID: 1386954 [PubMed - indexed for MEDLINE]

182: Fleer R. Chen XJ, Amellal N, Yeh P, Fournier A, Guinet F, Gault N, Faucher D, Folliard F, Fukuhara H, et al.

High-level secretion of correctly processed recombinant human interleukin-1 beta in Kluyveromyces lactis.

Gene. 1991 Nov 15;107(2):285-95.

PMID: 1748298 [PubMed - indexed for MEDLINE]

183: Livi GP, Lillquist JS, Miles LM, Ferrara A, Sathe GM, Simon PL, Related Articles, Links Meyers CA, Gorman JA, Young PR.

Secretion of N-glycosylated interleukin-1 beta in Saccharomyces cerevisiae using a leader peptide from Candida albicans. Effect of N-

linked glycosylation on biological activity. J Biol Chem. 1991 Aug 15;266(23):15348-55.

PMID: 1869556 [PubMed - indexed for MEDLINE]

184: Mazzolla R. Barluzzi R. Romani L. Mosci P. Bistoni F. Related Articles, Links

Anti-Candida resistance in the mouse brain and effect of intracerebral administration of interleukin 1.

J Gen Microbiol. 1991 Aug; 137(8):1799-804.

PMID: 1955866 [PubMed - indexed for MEDLINE]

185: Curtis BM, Williams DE, Broxmeyer HE, Dunn J, Farrah T, Jeffery E, Clevenger W, deRoos P, Martin U, Friend D, et al.

Related Articles, Links

Enhanced hematopoietic activity of a human granulocyte/macrophage colony-stimulating factor-interleukin 3 fusion protein.

Proc Natl Acad Sci U S A. 1991 Jul 1;88(13):5809-13. PMID: 1829529 [PubMed - indexed for MEDLINE]

186: Guisez Y, Tison B, Vandekerckhove J, Demolder J, Bauw G, Haegeman G, Fiers W, Contreras R.

Related Articles, Links

cb hgeeefcg ech be

h



Production and purification of recombinant human interleukin-6 secreted by the yeast Saccharomyces cerevisiae.

Eur J Biochem. 1991 May 23;198(1):217-22.

PMID: 2040282 [PubMed - indexed for MEDLINE]

187: Blanchard DK, Michelini-Norris MB, Djeu JY.

Related Articles, Links



Production of granulocyte-macrophage colony-stimulating factor by large granular lymphocytes stimulated with Candida albicans: role in activation of human neutrophil function.

Blood. 1991 May 15,77(10):2259-65.

PMID: 2029583 [PubMed - indexed for MEDLINE]

188: Williams DE, Park LS.

Related Articles, Links



Hematopoietic effects of a granulocyte-macrophage colony-stimulating factor/interleukin-3 fusion protein.

Cancer. 1991 May 15;67(10 Suppl):2705-7. Review. PMID: 2015572 [PubMed - indexed for MEDLINE]

189: Zhang JD, Cousens LS, Barr PJ, Sprang SR.

Related Articles, Links



Three-dimensional structure of human basic fibroblast growth factor, a structural homolog of interleukin 1 beta.

Proc Natl Acad Sci U S A. 1991 Apr 15;88(8):3446-50. Erratum in: Proc Natl Acad Sci U S A 1991 Jun 15;88(12):5477.

PMID: 1849658 [PubMed - indexed for MEDLINE]

190: Ingley E. Cutler RL, Fung MC, Sanderson CJ, Young IG.

Related Articles, Links



Production and purification of recombinant human interleukin-5 from yeast and baculovirus expression systems.

Eur J Biochem. 1991 Mar 28;196(3):623-9.

PMID: 2013285 [PubMed - indexed for MEDLINE]

191: Bazzoni F, Cassatella MA, Rossi F, Ceska M, Dewald B, Baggiolini M.

Related Articles, Links



Phagocytosing neutrophils produce and release high amounts of the neutrophil-activating peptide 1/interleukin 8.

J Exp Med. 1991 Mar 1;173(3):771-4.

PMID: 1997655 [PubMed - indexed for MEDLINE]

192: Koltin Y, Faucette L, Bergsma DJ, Levy MA, Cafferkey R, Koser Related Articles, Links PL, Johnson RK, Livi GP



Rapamycin sensitivity in Saccharomyces cerevisiae is mediated by a peptidyl-prolyl cis-trans isomerase related to human FK506-binding protein.

Mol Cell Biol. 1991 Mar; 11(3):1718-23.

PMID: 1996117 [PubMed - indexed for MEDLINE]

193: Ganser A, Lindemann A, Seipelt G, Ottmann OG, Herrmann F, Eder M, Frisch J, Schulz G, Mertelsmann R, Hoelzer D.

Related Articles, Links



Clinical effects of recombinant human interleukin-3.

Am J Clin Oncol. 1991;14 Suppl 1:S51-63. Review. PMID: 2048566 [PubMed - indexed for MEDLINE]

13194: wan Leen RW, Bakhuis.JG, <a href="https://wan.Beckhoven.RF, Burger H, Related Articles, <a href="https://Links.ncen.RW.Lemson.PJ, Noordam.B.Persoon.NL, Wan.Beckhoven.RF, Burger.H., Related Articles, <a href="https://Links.ncen.RW.Lemson.PJ, Noordam.B.Persoon.NL, Wan.Bakhuis.JG, Van.Beckhoven.RF, Burger.HL, Related Articles, Links, <a href="https://www.lemson.PJ, Noordam.B.Persoon.NL, Wan.Bakhuis.JG, Wan.Ba



Production of human interleukin-3 using industrial microorganisms. Biotechnology (N Y). 1991 Jan;9(1):47-52.

PMID: 1367211 [PubMed - indexed for MEDLINE]

Scaringi L. Cornacchione P. Rosati E. Boccanera M. Cassone A. Related Articles, Links

h

cb

hg e e

e fcg e ch

b e

| F 105 | Bistoni F, Marconi P. | |
|-----------------|---|-------------------------|
| 1195 | | |
| | Induction of LAK-like cells in the peritoneal cavity of Candida albicans. Cell Immunol. 1990 Sep;129(2):271-87. PMID: 2166624 [PubMed - indexed for MEDLINE] | mice by inactivated |
| □ 196 | : Djeu JY. | Related Articles, Links |
| | Role of tumor necrosis factor and colony-stimulating fa | actors in phagocyte |
| fixx. | function against Candida albicans. Diagn Microbiol Infect Dis. 1990 Sep-Oct;13(5):383-6. Review. PMID: 2126496 [PubMed - indexed for MEDLINE] | No abstract available. |
| □ 197 | : Antman KH. | Related Articles, Links |
| | G-CSF and GM-CSF in clinical trials. Yale J Biol Med. 1990 Sep-Oct;63(5):387-410. Review. PMID: 1705737 [PubMed - indexed for MEDLINE] | |
| □ 198 | Pucci P, Siciliano R, Ferranti P, Malorni A, Marino G. | Related Articles, Links |
| | Mass spectrometric characterization of recombinant hu | man interleukins 1 |
| <u> ::::::</u> | beta. Biotechnol Appl Biochem. 1990 Aug;12(4):357-63. PMID: 2205245 [PubMed - indexed for MEDLINE] | |
| □ 199 | Beno DW, Mathews HL. | Related Articles, Links |
| | Growth inhibition of Candida albicans by interleukin-2 node cells. Cell Immunol. 1990 Jun;128(1):89-100. PMID: 2188739 [PubMed - indexed for MEDLINE] | -induced lymph |
| □ 200 | Livi GP, Ferrara AA, Roskin R, Simon PL, Young PR. | Related Articles, Links |
| | Secretion of N-glycosylated human recombinant interlessaccharomyces cerevisiae. Gene. 1990 Apr 16;88(2):297-301. PMID: 2189790 [PubMed - indexed for MEDLINE] | eukin-l alpha in |
| □ 201: | Djeu JY, Matsushima K, Oppenheim JJ, Shiotsuki K, Blanchard DK. | Related Articles, Links |
| | Functional activation of human neutrophils by recombined derived neutrophil chemotactic factor/IL-8. J Immunol. 1990 Mar 15;144(6):2205-10. PMID: 2155963 [PubMed - indexed for MEDLINE] | nant monocyte- |
| □ 202: | Ptitsyn OB, Pain RH, Semisotnov GV, Zerovnik E, Razgulyaev OI | Related Articles, Links |
| | Evidence for a molten globule state as a general intermfolding. FEBS Lett. 1990 Mar 12;262(1):20-4. PMID: 2318308 [PubMed - indexed for MEDLINE] | ediate in protein |
| □ 203: | Urakov VN, Gorozhankina TF, Blidchenko IuA, Karpychev IV, El'darov MA, Skriabin KG, Beburov MIu, Surguchev AL, Ter-Avanesian MD, Smirnov VN. | Related Articles, Links |
| | [Mutant Saccharomyces cerevisiae yeasts with an incre heterologous protein secretion] Dokl Akad Nauk SSSR. 1990;314(3):736-8. Russian. No abstract a PMID: 2272275 [PubMed - indexed for MEDLINE] | |
| □ 204: | Csato M, Kenderessy AS, Judak R, Dobozy A. | Related Articles, Links |

Inflammatory mediators are involved in the Candida albicans killing activity of human epidermal cells. Arch Dermatol Res. 1990;282(5):348-50. No abstract available. PMID: 2221987 [PubMed - indexed for MEDLINE] 205: Van Oosterhout AJ, Nijkamp FP. Related Articles, Links Effect of human interleukin-2 from different sources on lymphocyte and airway beta-adrenoceptor function. Int J Immunopharmacol. 1990;12(4):409-12. PMID: 2167879 [PubMed - indexed for MEDLINE] 206: Solari R. Quint D. Obray H. McNamee A. Bolton E. Hissey P. Related Articles, Links Champion B, Zanders E, Chaplin A, Coomber B, et al. Purification and characterization of recombinant human interleukin 4. Biological activities, receptor binding and the generation of monoclonal antibodies. Biochem J. 1989 Sep 15;262(3):897-908. PMID: 2590174 [PubMed - indexed for MEDLINE] 207: Bleiberg I, Kletter Y, Riklis I, Fabian I Related Articles, Links Induction of murine macrophage fungal killing by interleukin 3. Exp Hematol. 1989 Sep; 17(8):895-7. PMID: 2788580 [PubMed - indexed for MEDLINE] 208: Tavernier J, Devos R, Van der Heyden J, Hauquier G, Bauden R. Related Articles, Links Fache I, Kawashima E, Vandekerckhove J, Contreras R, Fiers W. Expression of human and murine interleukin-5 in eukaryotic systems. ░ DNA. 1989 Sep;8(7):491-501. PMID: 2670497 [PubMed - indexed for MEDLINE] 209: Mangeney M, Fischer A, Le Deist F, Latge JP, Durandy A. Related Articles, Links Direct activation of human B lymphocytes by Candida albicans-derived mannan antigen. Cell Immunol. 1989 Sep;122(2):329-37. PMID: 2475258 [PubMed - indexed for MEDLINE] 210: Sherblom AP, Sathyamoorthy N, Decker JM, Muchmore AV. Related Articles, Links IL-2, a lectin with specificity for high mannose glycopeptides. J Immunol. 1989 Aug 1;143(3):939-44. PMID: 2787353 [PubMed - indexed for MEDLINE] 211: Casagli MC, Borri MG, Bigio M, Rossi R, Nucci D, Bossu P, Related Articles, Links Boraschi D. Antoni G. Different conformation of purified human recombinant interleukin 1 beta from Escherichia coli and Saccharomyces cerevisiae is related to different level of biological activity. Biochem Biophys Res Commun. 1989 Jul 14;162(1):357-63. PMID: 2473746 [PubMed - indexed for MEDLINE] 212: Prickett KS, Amberg DC, Hopp TP. Related Articles, Links A calcium-dependent antibody for identification and purification of recombinant proteins. Biotechniques. 1989 Jun;7(6):580-9. PMID: 2698650 [PubMed - indexed for MEDLINE] 213: Uchibayashi N, Kikutani H, Barsumian EL, Hauptmann R. Related Articles, Links Schneider FJ, Schwendenwein R, Sommergruber W, Spevak W, Maurer-Fogy I, Suemura M, et al.

Recombinant soluble Fc epsilon receptor II (Fc epsilon RII/CD23) has IgE

h cb hg e e e fcg e ch b e



binding activity but no B cell growth promoting activity.

J Immunol. 1989 Jun 1;142(11):3901-8.

PMID: 2523938 [PubMed - indexed for MEDLINE]

214: Riklis I, Kletter Y, Bleiberg I, Fabian I.

Related Articles, Links



Biological properties in vitro of a combination of recombinant murine interleukin-3 and granulocyte-macrophage colony-stimulating factor.

Eur J Haematol. 1989 Apr;42(4):375-81.

PMID: 2656292 [PubMed - indexed for MEDLINE]

215: Miyajima A, Arai K.

Related Articles, Links



Use of a cDNA expression-cloning vector and a secretion vector for mammalian gene expression in Saccharomyces cerevisiae.

Biotechnology. 1989;13:281-304. Review. No abstract available.

PMID: 2679929 [PubMed - indexed for MEDLINE]

216: Casagli MC, Borri MG, D'Ettorre C, Galeotti CL, Di Liegro C, Ghiara P, Antoni G. Related Articles, Links



Use of ZetaPrep cartridge for the purification of human recombinant interleukin 1 beta.

Prep Biochem. 1989;19(1):23-35.

PMID: 2662172 [PubMed - indexed for MEDLINE]

217: Perentesis JP, Genbauffe FS, Veldman SA, Galeotti CL, Livingston DM, Bodley JW, Murphy JR

Related Articles, Links



Expression of diphtheria toxin fragment A and hormone-toxin fusion proteins in toxin-resistant yeast mutants.

Proc Natl Acad Sci U S A. 1988 Nov;85(22):8386-90. PMID: 2847158 [PubMed - indexed for MEDLINE]

218: Morstyn G. Burgess AW.

Related Articles, Links



Hemopoietic growth factors: a review.

Cancer Res. 1988 Oct 15;48(20):5624-37. Review.

PMID: 2458827 [PubMed - indexed for MEDLINE]

219: Deepe GS Jr.

Related Articles, Links



Protective immunity in murine histoplasmosis: functional comparison of adoptively transferred T-cell clones and splenic T cells.

Infect Immun. 1988 Sep;56(9):2350-5.

PMID: 3261717 [PubMed - indexed for MEDLINE]

220: Krumwich D. Weinmann E. Seiler FR.

Related Articles, Links



Human recombinant derived IL-3 and GM-CSF in hematopoiesis of normal cynomolgus monkeys.

Behring Inst Mitt. 1988 Aug;(83):250-7.

PMID: 3071338 [PubMed - indexed for MEDLINE]

221: Gillis S, Urdal DL, Clevenger W, Klinke R, Sassenfeld H, Price V. Cosman D. Related Articles, Links



Production of recombinant human colony stimulating factors in yeast. Behring Inst Mitt. 1988 Aug; (83):1-7.

PMID: 3071326 [PubMed - indexed for MEDLINE]

222: Massone A. Baldari C. Censini S. Bartalini M. Nucci D. Boraschi Related Articles, Links D. Telford JL.



Mapping of biologically relevant sites on human IL-1 beta using monoclonal antibodies.

b e

J Immunol. 1988 Jun 1;140(11):3812-6.

PMID: 3259598 [PubMed - indexed for MEDLINE]

 $h \hspace{1cm} \mathsf{cb} \hspace{1cm} h \, \mathsf{g} \hspace{1cm} \mathsf{e} \hspace{1cm} \mathsf{e} \hspace{1cm} \mathsf{e} \hspace{1cm} \mathsf{fcg} \hspace{1cm} \mathsf{e} \hspace{1cm} \mathsf{ch}$

☐ 223: Ernst JF. Related Articles, Links Efficient secretion and processing of heterologous proteins in Saccharomyces cerevisiae is mediated solely by the pre-segment of alphafactor precursor. DNA. 1988 Jun;7(5):355-60. PMID: 3042320 [PubMed - indexed for MEDLINE] 1 224: Gough NM, Gearing DP, King JA, Willson TA, Hilton DJ, Nicola Related Articles, Links NA, Metcalf D Molecular cloning and expression of the human homologue of the murine gene encoding myeloid leukemia-inhibitory factor. Proc Natl Acad Sci U S A. 1988 Apr;85(8):2623-7. PMID: 3128791 [PubMed - indexed for MEDLINE] 225: Fink S. Finiasz M. Sterin-Borda L. Borda E, de Bracco MM. Related Articles, Links Interleukin 2 stimulates heart contractility in the presence of exogenous arachidonate or the calcium ionophore A 23187. Immunol Lett. 1988 Feb; 17(2):183-7. PMID: 3129371 [PubMed - indexed for MEDLINE] 226: Piccolella E, Lombardi G, Gobbi M, Gilardini MS, Del Porto P. Related Articles, Links Dolei A, Fioravanti D, Cochi S, Manella E, Colizzi V, Induction and regulation of cytotoxic T cells by microbial antigens and recombinant interleukin 2. Folia Biol (Praha). 1988;34(5):316-29. PMID: 3149595 [PubMed - indexed for MEDLINE] 227: Gough NM, Hilton DJ, Gearing DP, Willson TA, King JA, Nicola Related Articles, Links NA, Metcalf D. Biochemical characterization of murine leukaemia inhibitory factor produced by Krebs ascites and by yeast cells. Blood Cells. 1988;14(2-3):431-42. PMID: 3147726 [PubMed - indexed for MEDLINE] 228: Cosman D, Deeley MC, Price V, Klinke R, Clevenger W. Related Articles, Links Hemenway T, Anderson D, Sassenfeld H, Urdal DL. Human interleukin-3 and granulocyte-macrophage colony stimulating factor: site-specific mutagenesis and expression in yeast. Dev Biol Stand. 1988;69:9-13. PMID: 3066674 [PubMed - indexed for MEDLINE] 229: Baker PE. Related Articles, Links Bovine interleukin 2: cloning, high level expression, and purification. Vet Immunol Immunopathol. 1987 Dec;17(1-4):193-209. PMID: 3324464 [PubMed - indexed for MEDLINE] 230: Dieu JY, Blanchard DK. Related Articles, Links Regulation of human polymorphonuclear neutrophil (PMN) activity against Candida albicans by large granular lymphocytes via release of a PMN-activating factor. J Immunol. 1987 Oct 15;139(8):2761-7. PMID: 2443572 [PubMed - indexed for MEDLINE] 231: Park L.S. Friend D. Sassenfeld HM, Urdal DL. Related Articles, Links Characterization of the human B cell stimulatory factor 1 receptor. J Exp Med. 1987 Aug 1;166(2):476-88. PMID: 3496417 [PubMed - indexed for MEDLINE] 1 232: Koike K. Ogawa M, Ihle JN, Miyake T, Shimizu T, Miyajima A, Related Articles, Links

b e

e ch

e fcg

е

h

cb

h g

Yokota T. Arai K.



Recombinant murine granulocyte-macrophage (GM) colony-stimulating factor supports formation of GM and multipotential blast cell colonies in culture: comparison with the effects of interleukin-3.

J Cell Physiol. 1987 Jun;131(3):458-64.

PMID: 3298286 [PubMed - indexed for MEDLINE]

233: Lopez AF, To LB, Yang YC, Gamble JR, Shannon MF, Burns GF, Dyson PG, Juttner CA, Clark S, Vadas MA.

Related Articles, Links



Stimulation of proliferation, differentiation, and function of human cells by primate interleukin 3.

Proc Natl Acad Sci U S A. 1987 May;84(9):2761-5. PMID: 3495002 [PubMed - indexed for MEDLINE]

234: Price V. Mochizuki D. March CJ, Cosman D. Deeley MC, Klinke Related Articles, Links R. Clevenger W. Gillis S. Baker P. Urdal D.



Expression, purification and characterization of recombinant murine granulocyte-macrophage colony-stimulating factor and bovine interleukin-2 from yeast.

Gene. 1987;55(2-3):287-93.

PMID: 3311885 [PubMed - indexed for MEDLINE]

235: Baldari C, Murray JA, Ghiara P, Cesareni G, Galeotti CL.

Related Articles, Links



A novel leader peptide which allows efficient secretion of a fragment of human interleukin 1 beta in Saccharomyces cerevisiae.

EMBO J. 1987 Jan;6(1):229-34.

PMID: 3034576 [PubMed - indexed for MEDLINE]

1 236: Lopez AF, Williamson DJ, Gamble JR, Begley CG, Harlan JM, Klebanoff SJ, Waltersdorph A, Wong G, Clark SC, Vadas MA



Recombinant human granulocyte-macrophage colony-stimulating factor stimulates in vitro mature human neutrophil and eosinophil function, surface receptor expression, and survival.

J Clin Invest. 1986 Nov;78(5):1220-8.

PMID: 3021817 [PubMed - indexed for MEDLINE]

237: Rhodes J, Ivanyi J, Cozens P.

Related Articles, Links



Antigen presentation by human monocytes: effects of modifying major histocompatibility complex class II antigen expression and interleukin 1 production by using recombinant interferons and corticosteroids. Eur J Immunol. 1986 Apr;16(4):370-5.

PMID: 2422040 [PubMed - indexed for MEDLINE]

238: Zhu J. Contreras R. Fiers W.

Related Articles, Links



Construction of stable laboratory and industrial yeast strains expressing a foreign gene by integrative transformation using a dominant selection system.

Gene. 1986;50(1-3):225-37.

PMID: 3556323 [PubMed - indexed for MEDLINE]

239: Shaw AR, Bleackley RC, Merryweather JP, Barr PJ.

Related Articles, Links



Modulation of human natural killer cell activity by recombinant human interleukin 2.

Cell Immunol. 1985 Mar;91(1):193-200.

PMID: 3871664 [PubMed - indexed for MEDLINE]

240: Shaw AR, Bleackley RC, Merryweather JP, Barr PJ.

Related Articles, Links

Modulation of human natural killer cell activity by recombinant human

interleukin 2.

Cell Immunol. 1985 Feb;90(2):547-54.

PMID: 3881192 [PubMed - indexed for MEDLINE]

241: Miyajima A. Bond MW, Otsu K, Arai K, Arai N.

Related Articles, Links

Secretion of mature mouse interleukin-2 by Saccharomyces cerevisiae: use of a general secretion vector containing promoter and leader sequences of the mating pheromone alpha-factor.

Gene. 1985;37(1-3):155-61.

PMID: 3902570 [PubMed - indexed for MEDLINE]

242: Bleackley RC, Barr PJ, Havele C, Hooton J, Ng J, Meier M, Merryweather JP, Gibbs C, Pactkau V.

Related Articles, Links

Biologic activities of recombinant human interleukin 2 on murine

lymphocytes.

Lymphokine Res. 1985 Spring;4(2):117-31.

PMID: 3873588 [PubMed - indexed for MEDLINE]

Display Summary Show: 500 - Sort - Send to Text -

Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Peb 25 2005 07:07:33







| | My | NC |
|-----------|-----|-------|
| [Sign In] | [Re | giste |

| | | | | * | | | | | |
|--------------|--------|-------------|---------------|--------|-----------|------|-----|-------------|-------|
| Entrez | PubMed | Nucleotide | Protein | Genome | Stricture | OMIM | PMC | Journals | Sooks |
| Search | PubMed | | for | | | | G | Clear | |
| | | ∠ Limits | Preview/Index | | Clipboard | 52 | × | | |
| About Entre | 9Z | Display | Abstract | 60000 | Show: 20 | Sort | | end to Text | |
| Text Version | 'n | X 25 . 4 | eview: 0 🗽 | | | | | | |

Entrez PubMed Overview Help | FAQ Tutorial New/Noteworthy E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
My NCBI (Cubby)

Related Resources
Order Documents
NLM Catalog
NLM Galeway
TOXNET
Consumer Health
Clinical Alerts
Clinical Trials.gov
PubMed Central

1: Gene. 1985;37(1-3):155-61.

Related Articles, Links

Secretion of mature mouse interleukin-2 by Saccharomyces cerevisiae: use of a general secretion vector containing promoter and leader sequences of the mating pheromone alpha-factor.

Miyajima A, Bond MW, Otsu K, Arai K, Arai N.

We have constructed a general expression vector which allows the synthesis and secretion of processed gene products in Saccharomyces cerevisiae. This vector contains yeast DNA, including the promoter of the mating pheromone (alpha-factor), its downstream leader sequence, and the TRP5 terminator. A cDNA [encoding mature mouse interleukin-2 (IL-2); Yokota et al., Proc. Natl. Acad. Sci. USA 82 (1984) 68-72] was fused immediately downstream to the alpha-factor leader sequence. The resulting recombinant plasmid directed the synthesis of mature mouse IL-2 in S. cerevisiae, with most of the T-cell growth-factor (TCGF) activity secreted into the culture fluid and extracellular space. TCGF activities in the cell extract, as well as in the culture fluid, increased in parallel with cell growth. Production of mature mouse IL-2 was inhibited by tunicamycin (TM), with precursor molecules accumulating in the cell extract. The precursor was processed accurately at the junction between the alpha-factor peptide leader sequence and the coding sequence downstream, yielding mature IL-2. The Mr of the secreted mouse IL-2 determined by sodium dodecyl sulfate (SDS)-polyacrylamide gel electrophoresis (PAGE) was 17 kDal, a value expected for the mature mouse IL-2 polypeptide based on the nucleotide (nt) sequence.

PMID: 3902570 [PubMed - indexed for MEDLINE]

| Ulsplay Abstract Show: 20 Sort Send to Text |
|---|
|---|

Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Feb 25 2005 07:07:33

h

cb

hg e e e

fcg c e

b b e

b c









of Medicine NIM Mucleotide OMEM Structure PMC: Journals Book Search PubMed for yeast recombinant interleukin-2 Go Clear Save Sea Preview/Index History Clipboard Details Display Summary ➤ Show: 500 ➤ Sort Send to About Entrez AH: 60 Review: 1 Text Version Items 1 - 60 of 60 One page. Entrez PubMed 1: Lin Y, Ya-Li Q, Wei-Cheng B, Xiao-Lan Y, Hong-Liang H, Huan-Related Articles, Links Overview Chun C. Help | FAQ Expression of an interleukin-6 - interleukin-2 fusion protein (pIL-6-IL-2) in Tutoria! New/Noteworthy P. pastoris. E-Utilities Eur Cytokine Netw. 2004 Jul-Sep; 15(3):240-6. PMID: 15542449 [PubMed - in process] PubMed Services 1 2: Montagnoli C, Sandini S, Bacci A, Romani L, La Valle R. Journals Database Related Articles, Links MeSH Database Immunogenicity and protective effect of recombinant enolase of Candida Single Citation Matcher **Batch Citation Matcher** albicans in a murine model of systemic candidiasis. Clinical Queries Med Mycol. 2004 Aug;42(4):319-24. LinkOut PMID: 15473356 [PubMed - indexed for MEDLINE] My NCBI (Cubby) 1 3: Wedlock DN, McCarthy AR, Doolin EE, Lacy-Hulbert SJ, Woolford Related Articles, Links MW. Buddle BM. Related Resources Order Documents Effect of recombinant cytokines on leucocytes and physiological changes in NLM Catalog bovine mammary glands during early involution. NLM Gateway J Dairy Res. 2004 May;71(2):154-61. TOXNET PMID: 15190942 [PubMed - indexed for MEDLINE] Consumer Health Clinical Alerts 4: Zhu N, Gao N, Wang Y, Wang X, Yang Y. ClinicalTrials.gov Related Articles, Links PubMed Central Expression of the negative co-stimulatory ligand sCD152 in the yeast, Pichia pastoris, and its regulation of antigen specific immune responses. Int Immunopharmacol. 2004 Jan;4(1):139-48. PMID: 14975368 [PubMed - indexed for MEDLINE] 5: Vanlandschoot P, Van Houtte F, Hoek F, Nieuwland R, Leroux-Related Articles, Links Roels G. Saccharomyces cerevisiae-derived HBsAg preparations differ in their attachment to monocytes, immune-suppressive potential, and T-cell immunogenicity. J Med Virol. 2003 Aug;70(4):513-9. PMID: 12794712 [PubMed - indexed for MEDLINE] 6: Lebedev VF, Kozlov VK, Gavrilin SV Related Articles, Links [Immunopathogenesis of severe wounds and traumas: possibilities of immune correction]

Vestn Khir Im I I Grek. 2002;161(4):85-90. Russian. PMID: 12577564 [PubMed - indexed for MEDLINE]

7: Matsumoto H, Liao S, Arakawa F, Ueno A, Abe H, Awasthi A, Related Articles, Links Kuroki M, Kuroki M.

Targeting of interleukin-2 to human MK-1-expressing carcinoma by fusion with a single-chain Fv of anti-MK-1 antibody. Anticancer Res. 2002 Jul-Aug;22(4):2001-7.

PMID: 12174877 [PubMed - indexed for MEDLINE]

Related Articles, Links

8: Wu L. Fu J, Shen SH. Related Articles, Links SKAP55 coupled with CD45 positively regulates T-cell receptor-mediated gene transcription. Mol Cell Biol. 2002 Apr;22(8):2673-86. PMID: 11909961 [PubMed - indexed for MEDLINE] 9: Svirshchevskaya EV, Alekseeva L, Marchenko A, Viskova N, Related Articles, Links Andronova TM, Benevolenskii SV, Kurup VP. Immune response modulation by recombinant peptides expressed in viruslike particles. Clin Exp Immunol. 2002 Feb;127(2):199-205. PMID: 11876740 [PubMed - indexed for MEDLINE] 10: Chen CY, Gherzi R, Ong SE, Chan EL, Raijmakers R, Pruijn GJ, Related Articles, Links Stoecklin G, Moroni C, Mann M, Karin M AU binding proteins recruit the exosome to degrade ARE-containing mRNAs. Cell. 2001 Nov 16;107(4):451-64. PMID: 11719186 [PubMed - indexed for MEDLINE] 11: Gilbert M. Related Articles, Links A view of the future: Dr. Mark Gilbert of Immunex talks about immune based therapy. Interview by Robert Nielsen. STEP Perspect. 1998 Winter; 98(1):15-7. PMID: 11365210 [PubMed - indexed for MEDLINE] 12: Rycyzyn MA, Reilly SC, O'Malley K, Clevenger CV. Related Articles, Links Role of cyclophilin B in prolactin signal transduction and nuclear retrotranslocation. Mol Endocrinol. 2000 Aug;14(8):1175-86. PMID: 10935542 [PubMed - indexed for MEDLINE] 13: Wedlock DN, Doolin EE, Parlane NA, Lacy-Hulbert SJ, Woolford Related Articles, Links MW, Buddle BM. Effects of yeast expressed recombinant interleukin-2 and interferon-gamma on physiological changes in bovine mammary glands and on bactericidal activity of neutrophils. J Dairy Res. 2000 May;67(2):189-97. PMID: 10840672 [PubMed - indexed for MEDLINE] 114: Rajagopal K, Sommers CL, Decker DC, Mitchell EO, Korthauer U, Relaied Articles, Links Sperling AI, Kozak CA, Love PE, Bluestone JA. RIBP, a novel Rlk/Txk- and itk-binding adaptor protein that regulates T cell activation. J Exp Med. 1999 Dec 6;190(11):1657-68. PMID: 10587356 [PubMed - indexed for MEDLINE] 15: Romero F. Martinez-A C, Camonis J, Rebollo A. Related Articles, Links Aiolos transcription factor controls cell death in T cells by regulating Bcl-2 expression and its cellular localization. EMBO J. 1999 Jun 15;18(12):3419-30.

PMID: 10369681 [PubMed - indexed for MEDLINE]

16: Zhu M, John S, Berg M, Leonard WJ.

Functional association of Nmi with Stat5 and Stat1 in IL-2- and IFNgamma-mediated signaling.

Cell. 1999 Jan 8;96(1):121-30.

PMID: 9989503 [PubMed - indexed for MEDLINE]

17: Arancia G, Stringaro A, Crateri P, Torosantucci A, Ramoni C, Related Articles, Links Urbani F, Ausiello CM, Cassone A Interaction between human interleukin-2-activated natural killer cells and heat-killed germ tube forms of Candida albicans. Cell Immunol. 1998 May 25;186(1):28-38. PMID: 9637762 [PubMed - indexed for MEDLINE] 18: Zanetta JP, Bonaly R, Maschke S, Strecker G, Michalski JC. Related Articles, Links Differential binding of lectins IL-2 and CSL to candida albicans and cancer Glycobiology. 1998 Mar;8(3):221-5. PMID: 9451031 [PubMed - indexed for MEDLINE] 19: Noguchi M, Sarin A, Aman MJ, Nakajima H, Shores EW, Henkart Related Articles, Links PA, Leonard WJ. Functional cleavage of the common cytokine receptor gamma chain (gammac) by calpain. Proc Natl Acad Sci U S A. 1997 Oct 14;94(21):11534-9. PMID: 9326644 [PubMed - indexed for MEDLINE] 20: Nagira M, Imai T, Hieshima K, Kusuda J, Ridanpaa M, Takagi S. Related Articles, Links Nishimura M, Kakizaki M, Nomiyama H, Yoshie O. Molecular cloning of a novel human CC chemokine secondary lymphoidtissue chemokine that is a potent chemoattractant for lymphocytes and mapped to chromosome 9p13. J Biol Chem. 1997 Aug 1;272(31):19518-24. PMID: 9235955 [PubMed - indexed for MEDLINE] 21: Endo TA, Masuhara M, Yokouchi M, Suzuki R, Sakamoto H, Related Articles, Links Mitsui K, Matsumoto A, Tanimura S, Ohtsubo M, Misawa H, Miyazaki T, Leonor N, Taniguchi T, Fujita T, Kanakura Y, Komiya S. Yoshimura A. A new protein containing an SH2 domain that inhibits JAK kinases. Nature. 1997 Jun 26;387(6636):921-4. PMID: 9202126 [PubMed - indexed for MEDLINE] 22: Ng KH, Aldwell FE, Wedlock DN, Watson JD, Buddle BM. Related Articles, Links Antigen-induced interferon-gamma and interleukin-2 responses of cattle inoculated with Mycobacterium bovis. Vet Immunol Immunopathol. 1997 Jun;57(1-2):59-68. PMID: 9239838 [PubMed - indexed for MEDLINE] 23: Shliapnikov SA, Bubnova N, Eriukhin IA. Related Articles, Links [The principle of cytokine therapy in the sepsis syndrome (a preliminary report)] Vestn Khir Im I I Grek. 1997;156(2):51-4. Russian. PMID: 9235767 [PubMed - indexed for MEDLINE] . 24: Kamiya T, Sugio S, Yamanouchi K, Kagitani Y. Related Articles, Links Secretion of active Fc fragments of immunoglobulin E directed by the yeast invertase signal sequence in mammalian cells. Tohoku J Exp Med. 1996 Dec; 180(4):297-308. PMID: 9130368 [PubMed - indexed for MEDLINE] 1 25: Sun J, Bird CH, Sutton V, McDonald L, Coughlin PB, De Jong TA. Related Articles, Links Trapani JA, Bird PI

A cytosolic granzyme B inhibitor related to the viral apoptotic regulator cytokine response modifier A is present in cytotoxic lymphocytes.

h cb hg e e e fcg e ch b e

J Biol Chem. 1996 Nov 1;271(44):27802-9.

PMID: 8910377 [PubMed - indexed for MEDLINE] 26: Brunn GJ, Williams J, Sabers C, Wiederrecht G, Lawrence JC Jr, Related Articles, Links Abraham RT. Direct inhibition of the signaling functions of the mammalian target of rapamycin by the phosphoinositide 3-kinase inhibitors, wortmannin and LY294002. EMBO J. 1996 Oct 1;15(19):5256-67. PMID: 8895571 [PubMed - indexed for MEDLINE] 27: Gulav Z, Imir T. Related Articles, Links Anti-candidial activity of natural killer (NK) and lymphokine activated killer (LAK) lymphocytes in vitro. Immunobiology. 1996 Jul; 195(2):220-30. PMID: 8877398 [PubMed - indexed for MEDLINE] 28: Zhang X, Huang B, Cai L. Related Articles, Links [Interleukin-2 gene cloning and expression in S. cerevisiae] Zhongguo Yi Xue Ke Xue Yuan Xue Bao. 1995 Aug;17(4):274-80. Chinese. PMID: 8575049 [PubMed - indexed for MEDLINE] 29: Stowers L. Yelon D, Berg LJ, Chant J. Related Articles, Links Regulation of the polarization of T cells toward antigen-presenting cells by Ras-related GTPase CDC42. Proc Natl Acad Sci U S A. 1995 May 23;92(11):5027-31. PMID: 7761442 [PubMed - indexed for MEDLINE] 30: Beno DW, Stover AG, Mathews HL. Related Articles, Links Growth inhibition of Candida albicans hyphae by CD8+ lymphocytes. J Immunol. 1995 May 15;154(10):5273-81. PMID: 7730631 [PubMed - indexed for MEDLINE] 31: Krupnova OF, Sizova NI, Smolianitskii AG. Related Articles, Links [Increase in the yield of recombinant proteins in Saccharomyces cerevisiae yeasts as a result of optimizing their culture conditions] Prikl Biokhim Mikrobiol. 1995 May-Jun;31(3):311-5. Russian. PMID: 7638157 [PubMed - indexed for MEDLINE] 132: Bujdoso R, Williamson M, Roy D, Hunt P, Blacklaws B, Sargan D. Related Articles, Links McConnell I. Molecular cloning and expression of DNA encoding ovine interleukin 2. Cytokine. 1995 Apr;7(3):223-31. PMID: 7543777 [PubMed - indexed for MEDLINE] 33: Grinev MV, Tsibin IuN, Tarelkina MN, Gromov MI, Shirokov DM, Related Articles, Links Pivovarova LP, Frolov GM, Razumova NK, Masiianskaia TI, Ariskina OB. [A first trial of the use of human recombinant interleukin (rIL-2) in patients with tumorous diseases] Vestn Khir Im I I Grek. 1995;154(2):57-60. Russian. PMID: 8540190 [PubMed - indexed for MEDLINE] 1 34: Grinev MV, Gromov MI, Tsibin luN, Tarelkina MN, Shirokov DM. Related Articles, Links Pivovarova LP, Razumova NK, Masilianskaia TI, Ariskina OB, Guida OG [Interleukin-1 in combined detoxification therapy of surgical sepsis]

h cb h g e fcg e ch

Anesteziol Reanimatol. 1994 Nov-Dec;(6):25-8. Russian. PMID: 7733474 [PubMed - indexed for MEDLINE]

35: Scaringi L. Cornacchione P. Rosati E. Fettucciari K. Rossi R.

Related Articles, Links

Marconi P



Induction and persistence in vivo of NK/LAK activity by a mannoprotein component of Candida albicans cell wall.

Cell Immunol. 1994 May; 155(2):265-82.

PMID: 8181065 [PubMed - indexed for MEDLINE]

36: Sjogren-Jansson E, Gustafsson C, Jeansson S, Karlsson U, Lycke Related Articles, Links N.



Production of large amounts of recombinant interleukins by cDNA transfected mouse myeloma cells cultured in dialysis tubing. J Immunol Methods. 1994 Jan 12;168(1):131-6.

PMID: 8288889 [PubMed - indexed for MEDLINE]

37: Cunningham-Rundles C. Mayer L. Sapira E. Mendelsohn L.

Related Articles, Links



Restoration of immunoglobulin secretion in vitro in common variable immunodeficiency by in vivo treatment with polyethylene glycol-conjugated human recombinant interleukin-2.

Clin Immunol Immunopathol. 1992 Jul;64(1):46-56. PMID: 1606751 [PubMed - indexed for MEDLINE]

38: Beno DW, Mathews HL.

Related Articles, Links



Growth inhibition of Candida albicans by interleukin-2-activated splenocytes.

Infect Immun. 1992 Mar;60(3):853-63.

PMID: 1541559 [PubMed - indexed for MEDLINE]

39: Scaringi L. Rosati E. Cornacchione P. Rossi R. Marconi P.

Related Articles, Links



In vivo modulation of lymphokine-activated killer cell activity by cell wall components of Candida albicans.

Cell Immunol. 1992 Feb;139(2):438-54.

PMID: 1733513 [PubMed - indexed for MEDLINE]

1 40: Degrassi A, Mariani E, Honorati MC, Roda P, Miniero R, Capelli M, Facchini A. Related Articles, Links



Cellular response and anti-HBs synthesis in vitro after vaccination with yeast-derived recombinant hepatitis vaccine.

Vaccine. 1992;10(9):617-22.

PMID: 1386954 [PubMed - indexed for MEDLINE]

41: Koltin Y, Faucette L, Bergsma DJ, Levy MA, Cafferkey R, Koser PL, Johnson RK, Livi GP.



Rapamycin sensitivity in Saccharomyces cerevisiae is mediated by a peptidyl-prolyl cis-trans isomerase related to human FK506-binding protein.

Mol Cell Biol. 1991 Mar;11(3):1718-23.

PMID: 1996117 [PubMed - indexed for MEDLINE]

12: Scaringi L, Cornacchione P, Rosati E, Boccanera M, Cassone A, Bistoni F, Marconi P. Related Articles, Links



Induction of LAK-like cells in the peritoneal cavity of mice by inactivated Candida albicans.

Cell Immunol. 1990 Sep; 129(2):271-87.

PMID: 2166624 [PubMed - indexed for MEDLINE]

1 43: Beno DW, Mathews HL.

Related Articles, Links



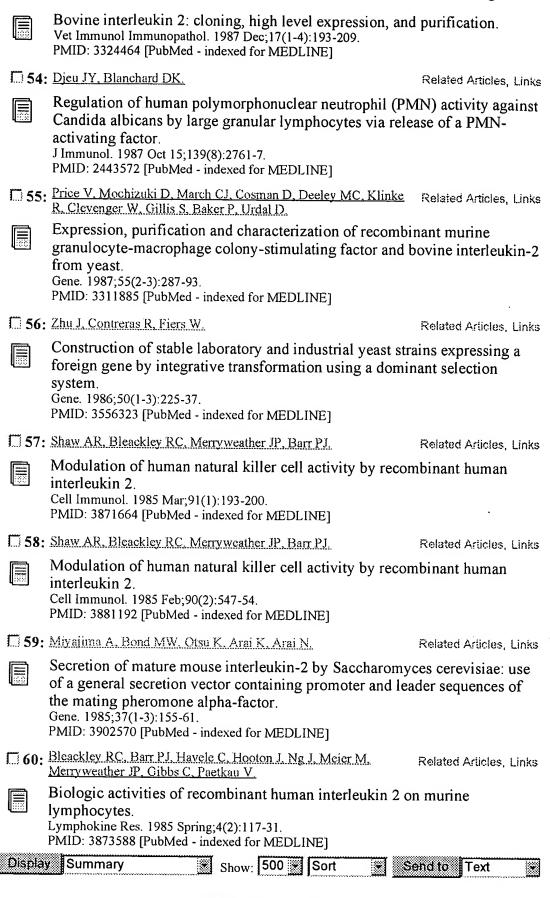
Growth inhibition of Candida albicans by interleukin-2-induced lymph node cells.

Cell Immunol. 1990 Jun; 128(1):89-100.

PMID: 2188739 [PubMed - indexed for MEDLINE]

| □ 44 | Urakov VN, Gorozhankina TF, Blidchenko IuA, Karpychev IV, El'darov MA, Skriabin KG, Beburov MIu, Surguchev AL, Ter-Avanesian MD, Smirnov VN. | Related Articles, Links |
|-------------|---|-------------------------|
| | [Mutant Saccharomyces cerevisiae yeasts with an increase heterologous protein secretion] Dokl Akad Nauk SSSR. 1990;314(3):736-8. Russian. No abstract av PMID: 2272275 [PubMed - indexed for MEDLINE] | |
| □ 45 | Van Oosterhout AJ, Nijkamp FP | Related Articles, Links |
| | Effect of human interleukin-2 from different sources on lairway beta-adrenoceptor function. Int J Immunopharmacol. 1990;12(4):409-12. PMID: 2167879 [PubMed - indexed for MEDLINE] | ymphocyte and |
| 1 46 | Mangeney M, Fischer A, Le Deist F, Latge JP, Durandy A. | Related Articles, Links |
| | Direct activation of human B lymphocytes by Candida al mannan antigen. Cell Immunol. 1989 Sep;122(2):329-37. PMID: 2475258 [PubMed - indexed for MEDLINE] | bicans-derived |
| □ 47: | Sherblom AP, Sathyamoorthy N, Decker JM, Muchmore AV. | Related Articles, Links |
| | IL-2, a lectin with specificity for high mannose glycopep J Immunol. 1989 Aug 1;143(3):939-44. PMID: 2787353 [PubMed - indexed for MEDLINE] | tides. |
| □ 48: | Miyajima A, Arai K. | Related Articles, Links |
| | Use of a cDNA expression-cloning vector and a secretion mammalian gene expression in Saccharomyces cerevisia. Biotechnology. 1989;13:281-304. Review. No abstract available. PMID: 2679929 [PubMed - indexed for MEDLINE] | |
| □ 49: | Perentesis JP, Genbauffe FS, Veldman SA, Galeotti CL, Livingston DM, Bodley JW, Murphy JR. | Related Articles, Links |
| | Expression of diphtheria toxin fragment A and hormone-proteins in toxin-resistant yeast mutants. Proc Natl Acad Sci U S A. 1988 Nov;85(22):8386-90. PMID: 2847158 [PubMed - indexed for MEDLINE] | toxin fusion |
| □ 50: | Deepe GS Jr. | Related Articles, Links |
| | Protective immunity in murine histoplasmosis: functional adoptively transferred T-cell clones and splenic T cells. Infect Immun. 1988 Sep;56(9):2350-5. PMID: 3261717 [PubMed - indexed for MEDLINE] | comparison of |
| □ 51: | Fink S, Finiasz M, Sterin-Borda L, Borda E, de Bracco MM. | Related Articles, Links |
| | Interleukin 2 stimulates heart contractility in the presence arachidonate or the calcium ionophore A 23187. Immunol Lett. 1988 Feb; 17(2):183-7. PMID: 3129371 [PubMed - indexed for MEDLINE] | of exogenous |
| □ 52: | Piccolella E, Lombardi G, Gobbi M, Gilardini MS, Del Porto P, Dolei A, Fioravanti D, Cochi S, Manella E, Colizzi V. | Related Articles, Links |
| | Induction and regulation of cytotoxic T cells by microbia recombinant interleukin 2. Folia Biol (Praha). 1988;34(5):316-29. PMID: 3149595 [PubMed - indexed for MEDLINE] | l antigens and |
| □ 53: | Baker PE. | Related Articles, Links |

 $h \hspace{1cm} cb \hspace{1cm} h \hspace{1cm} g \hspace{1cm} e \hspace{1cm} e \hspace{1cm} fcg \hspace{1cm} e \hspace{1cm} ch \hspace{1cm} b \hspace{1cm} e$



Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer







| My NC |
|--------------------|
| [Sign In] [Registe |

| | | | | ** | | | | | |
|--------------|--------|-------------|---------------|-----------|---|---|------|------------|-------|
| Entrez | PubMed | Nucleotide | Protein | Genome | eudure | OMIM | PMC | Journals | Books |
| Search | PubMed | | for | | *************************************** | *************************************** | G | Clear | |
| | | ∠ Limits | Preview/Index | K History | Clipboard | ∿. Delai | ls \ | | |
| About Entr | 2512 | Display | Abstract | 50000 | Show: 20 | Sort | y Se | nd to Text | 9 |
| Court Vacaio | | All: 1 R | eview: 0 🔏 | | | | | • | |

Text Version

Entrez PubMed Overview Help | FAQ Tutorial New/Noteworthy E-Utilities

PubMed Services Journals Database MeSH Database Single Citation Matcher **Batch Citation Matcher** Clinical Queries LinkOut My NCBI (Cubby)

Related Resources Order Documents NLM Catalog NLM Gateway TOXNET Consumer Health Clinical Alerts ClinicalTrials.gov **PubMed Central**

1: Cytokine. 1995 Apr;7(3):223-31.

Related Articles, Links

FULL-TEXT-ARTICLE

Molecular cloning and expression of DNA encoding ovine interleukin 2.

Bujdoso R, Williamson M, Roy D, Hunt P, Blacklaws B, Sargan D, McConnell I.

Department of Veterinary Pathology, Summerhall, University of Edinburgh.

We have generated DNA encoding the mature form of ovine interleukin 2 (IL-2) by polymerase chain reaction (PCR) using primers complementary to sequences at the 5' and 3' ends of human, murine and bovine IL-2 cDNA. The predicted PCR product of 400 bp was ligated into the yeast Ty-P1 galactoseinducible expression vector pOGS40 which was used to transform yeast spheroplasts. The fusion protein, with a Factor Xa proteolytic cleavage site between ovine IL-2 and the P1 fusion partner, was expressed from galactoseinduced transformed yeast. P1:IL-2 fusion protein, which self-assembles into virus-like particles (VLPs) due to the interaction of the P1 protein, was purified from lysates of mechanically disrupted yeast by centrifugation on a discontinuous sucrose gradient. Fusion protein was detected in Western blot analysis with polyclonal antisera raised to recombinant bovine IL-2. Soluble recombinant ovine IL-2 was released from the PI fusion protein by cleavage with Factor Xa enzyme. After purification recombinant ovine IL-2 was functionally active as shown by its ability to support the proliferation of Con A-activated T cells and was capable of generating maedi visna virus-specific cytotoxic T cells from primed precursor cells. The availability of recombinant ovine IL-2 will greatly help the analysis of the specificity of pathogen-specific cells in the sheep.

PMID: 7543777 [PubMed - indexed for MEDLINE]

| Display Abstract | Show: 20 \$ | Sort 💽 S | oeno io ∥iext • |
|------------------|-------------|----------|-----------------|
| | J 3 | | |

Write to the Help Desk NCBI | NLM | NIH Department of Health & Human Services Privacy Statement | Freedom of Information Act | Disclaimer

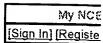
Feb 25:2005 07:07:33

b









| | | | | - 34 | | | | | |
|-----------|--------|------------|---------------|----------|---|-------------|-------------|------------|-------|
| Entrez | PubMed | Nucleotide | | Genome | Sancture | OMIM | PMC | Journals | Books |
| Search | PubMed | * | for | | *************************************** | | G | Clear | |
| | | ∠ Limits | Preview/Index | History | Clipboard | ∿⊭ Detai | ` ` | | |
| About Enl | rez | Display | Abstract | - Cooodi | how: 20 | Sort | <u> S</u> e | nd to Text | |
| Text Vers | ion | All: 1 R | eview: 0 🔭 | | | | | | |

Entrez PubMed Overview Help | FAQ Tutorial New/Noteworthy

E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
My NCBI (Cubby)

Related Resources
Order Documents
NLM Catalog
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

1: Cytokine. 1995 Apr;7(3):223-31.

Related Articles, Links

FULL-TEXY ARTIGLE

Molecular cloning and expression of DNA encoding ovine interleukin 2.

Bujdoso R, Williamson M, Roy D, Hunt P, Blacklaws B, Sargan D, McConnell I.

Department of Veterinary Pathology, Summerhall, University of Edinburgh.

We have generated DNA encoding the mature form of ovine interleukin 2 (IL-2) by polymerase chain reaction (PCR) using primers complementary to sequences at the 5' and 3' ends of human, murine and bovine IL-2 cDNA. The predicted PCR product of 400 bp was ligated into the yeast Ty-P1 galactoseinducible expression vector pOGS40 which was used to transform yeast spheroplasts. The fusion protein, with a Factor Xa proteolytic cleavage site between ovine IL-2 and the P1 fusion partner, was expressed from galactoseinduced transformed yeast. P1:IL-2 fusion protein, which self-assembles into virus-like particles (VLPs) due to the interaction of the P1 protein, was purified from lysates of mechanically disrupted yeast by centrifugation on a discontinuous sucrose gradient. Fusion protein was detected in Western blot analysis with polyclonal antisera raised to recombinant bovine IL-2. Soluble recombinant ovine IL-2 was released from the P1 fusion protein by cleavage with Factor Xa enzyme. After purification recombinant ovine IL-2 was functionally active as shown by its ability to support the proliferation of Con A-activated T cells and was capable of generating maedi visna virus-specific cytotoxic T cells from primed precursor cells. The availability of recombinant ovine IL-2 will greatly help the analysis of the specificity of pathogen-specific cells in the sheep.

PMID: 7543777 [PubMed - indexed for MEDLINE]

| Display Abstract - | Show: 20 Sort | Send to Text |
|--------------------|---------------|--------------|

Write to the Help Desk

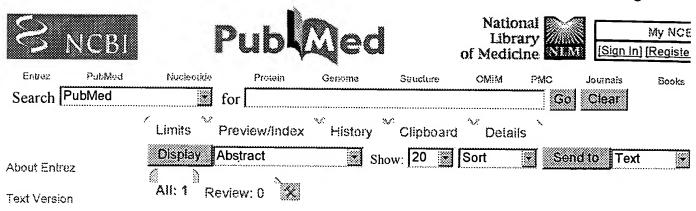
NCB! | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Feb 25/2005/07:07:33

e



Entrez PubMed Overview Help | FAQ Tutorial New/Noteworthy E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
My NCBL (Cubby)

Related Resources
Order Documents
NLM Catalog
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

1: J Dairy Res. 2000 May;67(2):189-97.

Related Articles, Links

Effects of yeast expressed recombinant interleukin-2 and interferon-gamma on physiological changes in bovine mammary glands and on bactericidal activity of neutrophils.

Wedlock DN, Doolin EE, Parlane NA, Lacy-Hulbert SJ, Woolford MW, Buddle BM.

AgResearch, Wallaceville Animal Research Centre, Upper Hutt, New Zealand.

The physiological effects of intramammary infusions of recombinant bovine cytokines in six lactating dairy cows on the quality and yield of milk and the bactericidal activity of milk neutrophils were investigated. Recombinant bovine interleukin-2 (rboIL-2) and interferon-gamma (rboIFN-gamma) were produced in the yeast Pichia pastoris. Two animals were given rboIL-2 (2 x 10 (5) units) in two quarters, two animals were given rboIFN-gamma (6.5 x 10(5) units) in two quarters, and the other two cows received a dose of rboIL-2 in one quarter and rboIFN-gamma in a second quarter. In addition, each animal was given phosphate-buffered saline (PBS) in the other two quarters as a control. Somatic cell counts and conductivity of the fore milk were monitored before and after infusion. Neutrophils were isolated from quarter milk samples 36 h after infusion of cytokine or PBS and their bactericidal activities against Staphylococcus aureus were measured in vitro with a colorimetric assay. Quarters infused with rboIL-2 or rboIFN-gamma showed significant but transitory increases in both milk somatic cell counts and conductivity when compared with preinfusion values and with control quarters. There were minimal effects on daily milk yield. Neutrophils isolated from milk from quarters infused with rboIL-2 showed enhanced bactericidal activity against Staph. aureus. The bacterial killing from rboIL-2 treated quarters was significantly greater, with a mean of 63.5% compared with a mean of 5.4% for neutrophils taken from uninfected quarters to which PBS had been administered. The bactericidal activities for quarters treated with rboIFNgamma and infected quarters treated with PBS were 15.0 and 30.0% respectively. The results indicate that intramammary infusions of rboIL-2 and rboIFN-gamma to lactating cows are well tolerated, and that rboIL-2 can activate milk neutrophils and augment their bactericidal activity.

PMID: 10840672 [PubMed - indexed for MEDLINE]









of Medicine NEW PubMed Mucleotide OMIM PMC Structure Journals Book Search | PubMed for recombinant interleukin-2 AND LAK AND brain tun Go Clear Save Sea Preview/Index History Clipboard Details Display Summary Show: |500 Sort Send to About Entrez All: 34 Review: 1 Text Version Items 1 - 34 of 34 One page. Entrez PubMed 1: Kikuchi T, Joki T, Abe T, Ohno T. Related Articles, Links Overview Help | FAQ Antitumor activity of killer cells stimulated with both interleukin-2 and Tutorial interleukin-12 on mouse glioma cells. New/Noteworthy J Immunother. 1999 May;22(3):245-50. E-Utilities PMID: 10335484 [PubMed - indexed for MEDLINE] **PubMed Services** 2: Rice CD, Baldwin NG, Biron RT, Bear HD, Merchant RE. Related Articles, Links Journals Database MeSH Database Ex vivo expansion of tumor-draining lymph node cells using compounds Single Citation Matcher which activate intracellular signal transduction. II. Cytokine production and **Batch Citation Matcher** in vivo efficacy of glioma-sensitized lymphocytes. Clinical Queries J Neurooncol. 1997 Mar;32(1):29-38. LinkOut PMID: 9049860 [PubMed - indexed for MEDLINE] My NCBI (Cubby) 3: Sankhla SK, Nadkarni JS, Bhagwati SN. Related Articles, Links Related Resources Order Documents Adoptive immunotherapy using lymphokine-activated killer (LAK) cells and NLM Catalog interleukin-2 for recurrent malignant primary brain tumors. NLM Galeway J Neurooncol. 1996 Feb;27(2):133-40. TOXNET PMID: 8699235 [PubMed - indexed for MEDLINE] Consumer Health Clinical Alerts 4: Nakagawa K, Kamezaki T, Shibata Y, Tsunoda T, Meguro K, Nose Related Articles, Links ClinicalTriats.gov PubMed Central Effect of lymphokine-activated killer cells with or without radiation therapy against malignant brain tumors. Neurol Med Chir (Tokyo). 1995 Jan;35(1):22-7. PMID: 7700478 [PubMed - indexed for MEDLINE] 5: Boiardi A, Silvani A, Ruffini PA, Rivoltini L, Parmiani G, Broggi G. Releted Articles, Links Salmaggi A Loco-regional immunotherapy with recombinant interleukin-2 and adherent lymphokine-activated killer cells (A-LAK) in recurrent glioblastoma Cancer Immunol Immunother. 1994 Sep;39(3):193-7. PMID: 7923250 [PubMed - indexed for MEDLINE] 6: Fujioka T, Nomura K, Hasegawa M, Ishikura K, Kubo T. Related Articles, Links Combination of lymphokine-activated killer cells and interleukin-2 in treating metastatic renal cell carcinoma. Br J Urol. 1994 Jan;73(1):23-31. PMID: 8298895 [PubMed - indexed for MEDLINE]

7: Blancher A, Roubinet F, Grancher AS, Tremoulet M, Bonate A,

Delisle MB, Calot JP, Pourreau C, Franks C, Ducos J, et al.

Related Articles, Links

h

cb

h g

fcg

e ch

b e

PMID: 8117934 [PubMed - indexed for MEDLINE] 8: Kruse CA, Mitchell DH, Kleinschmidt-DeMasters BK, Bellgrau D. Related Articles, Links Eule JM, Parra JR, Kong Q, Lillehei KO. Systemic chemotherapy combined with local adoptive immunotherapy cures rats bearing 9L gliosarcoma. J Neurooncol. 1993 Feb; 15(2):97-112. PMID: 8509824 [PubMed - indexed for MEDLINE] 9. Nakagawa K, Omori N, Hashimoto K, Yamamoto T, Tsunoda T, Related Articles, Links Nose T. The combined effect of lymphokine activated killer cell and radiation therapy on rat brain tumor in vitro. Biotherapy. 1992;4(2):109-15. PMID: 1622732 [PubMed - indexed for MEDLINE] 10: Hayes RL. Related Articles, Links The cellular immunotherapy of primary brain tumors. Rev Neurol (Paris). 1992;148(6-7):454-66. Review. PMID: 1448666 [PubMed - indexed for MEDLINE] 11: Yamamoto RS, Coss J, Vayuvegula B, Gupta S, Beamer Y, Jacques Related Articles, Links S. Jeffes EW 3rd, Carson WE 3rd, Jakowatz J, Granger GA Generation of stimulated, lymphokine activated T killer (T-LAK) cells from the peripheral blood of normal donors and adult patients with recurrent glioblastoma. J Immunol Methods. 1991 Mar 21;137(2):225-35. PMID: 2013699 [PubMed - indexed for MEDLINE] 12: Lillehei KO, Mitchell DH, Johnson SD, McCleary EL, Kruse CA. Related Articles, Links Long-term follow-up of patients with recurrent malignant gliomas treated with adjuvant adoptive immunotherapy. Neurosurgery. 1991 Jan;28(1):16-23. PMID: 1994273 [PubMed - indexed for MEDLINE] 13: Kruse CA, Lillehei KO, Mitchell DH, Kleinschmidt-DeMasters B. Related Articles, Links Bellgrau D. Analysis of interleukin 2 and various effector cell populations in adoptive immunotherapy of 9L rat gliosarcoma: allogeneic cytotoxic T lymphocytes prevent tumor take. Proc Natl Acad Sci U S A. 1990 Dec;87(24):9577-81. PMID: 2263613 [PubMed - indexed for MEDLINE] 14: Munari L, Silvani A, Passerini CG, Radrizzani M, Parmiani G, Related Articles, Links Boiardi A. Adoptive immunotherapy with adherent lymphokine-activated killer (A-LAK) cells in glioblastoma multiforme. J Neurosurg Sci. 1990 Jul-Dec;34(3-4):283-8. PMID: 1965907 [PubMed - indexed for MEDLINE] 15: Kikuchi T. Sakai H. Nakamura N. Watanabe M. Ohno T. Related Articles, Links [Analysis of cytolytic activity and cell surface phenotypes of lymphokine activated killer cells stimulated with R-IL 2 and an anti-CD 3 antibody] No To Shinkei. 1990 Jun;42(6):575-80. Japanese. PMID: 2119634 [PubMed - indexed for MEDLINE] 16: Jaaskelainen J, Lehtonen E, Heikkila P, Kalliomaki P, Timonen T. Related Articles, Links Damage to multicellular human H-2 glioma spheroids incubated with LAK cells: an ultrastructural study.

J Natl Cancer Inst. 1990 Mar 21;82(6):497-501. PMID: 2313722 [PubMed - indexed for MEDLINE] 17: Kruse CA, Mitchell DH, Lillehei KO, Johnson SD, McCleary EL. Related Articles, Links Moore GE, Waldrop S, Mierau GW. Interleukin-2-activated lymphocytes from brain tumor patients. A comparison of two preparations generated in vitro. Cancer. 1989 Oct 15;64(8):1629-37. PMID: 2790675 [PubMed - indexed for MEDLINE] 18: Shimizu K, Tamura K, Yamada M, Okamoto Y, Miyao Y, Park K. Related Articles, Links Matsui Y, Hayakawa T, Takimoto H, Mogami H. [Adoptive immunotherapy in patients with medulloblastoma by LAK cells] No To Shinkei. 1989 Oct;41(10):991-5. Japanese. PMID: 2605046 [PubMed - indexed for MEDLINE] 19: Moriki A. Related Articles, Links [Induction of LAK cells and CTL in patients with brain tumor and research of its clinical application] Nippon Geka Hokan. 1989 Jan 1;58(1):107-18. Japanese. PMID: 2802908 [PubMed - indexed for MEDLINE] 20: Hayakawa M. Masuda T. Higa I. Koyama Y. Hatano T. Oda M. Related Articles, Links Osawa A. [Regional transarterial infusion of autologous lymphokine-activated killer (LAK) cells for advanced renal cell carcinoma and its preliminary clinical Nippon Hinyokika Gakkai Zasshi. 1989 Jan;80(1):28-34. Japanese. PMID: 2786104 [PubMed - indexed for MEDLINE] 21: Naganuma H, Kimurat R, Sasaki A, Fukamachi A, Nukui H, Related Articles, Links Tasaka K. Complete remission of recurrent glioblastoma multiforme following local infusions of lymphokine activated killer cells. Case report. Acta Neurochir (Wien). 1989;99(3-4):157-60. PMID: 2549767 [PubMed - indexed for MEDLINE] 22: Merchant RE, Merchant LH, Cook SH, McVicar DW, Young HF. Related Articles, Links Intralesional infusion of lymphokine-activated killer (LAK) cells and recombinant interleukin-2 (rIL-2) for the treatment of patients with malignant brain tumor. Neurosurgery, 1988 Dec;23(6):725-32. PMID: 2851116 [PubMed - indexed for MEDLINE] 23: Kuppner MC, Hamou MF, Bodmer S, Fontana A, de Tribolet N. Related Articles, Links The glioblastoma-derived T-cell suppressor factor/transforming growth factor beta 2 inhibits the generation of lymphokine-activated killer (LAK) cells. Int J Cancer. 1988 Oct 15;42(4):562-7. PMID: 3262591 [PubMed - indexed for MEDLINE] 24: Yoshida S, Tanaka R, Takai N, Ono K. Related Articles, Links Local administration of autologous lymphokine-activated killer cells and recombinant interleukin 2 to patients with malignant brain tumors. Cancer Res. 1988 Sep 1;48(17):5011-6. PMID: 3261631 [PubMed - indexed for MEDLINE] 25: Merchant RE, Grant AJ, Merchant LH, Young HF, Related Articles, Links Adoptive immunotherapy for recurrent glioblastoma multiforme using

h

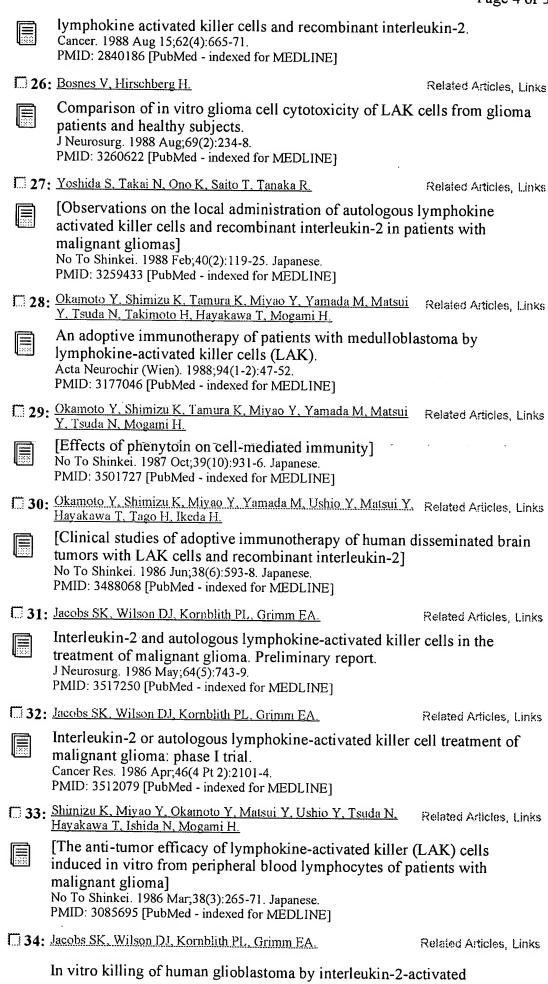
cb

h g

fcg

e ch

b e



h cb hgeeefcg ech be

autologous lymphocytes. J Neurosurg. 1986 Jan;64(1):114-7. PMID: 3001247 [PubMed - indexed for MEDLINE]

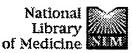
Summary Show: 500 Sort Send to Text

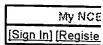
> Write to the Help Desk NCBI | NLM | NIH
>
> Department of Health & Human Services
>
> Privacy Statement | Freedom of Information Act | Disclaimer

> > Feb 28 2003 07:07:33









| | | | | | | | | | _ |
|------------|--------|------------|---------------|---------------|-----------|---|---|------------|-------|
| Entrez | PubMed | Nucleotide | Protein | Genome | Structure | OMIM | PMC | Journals | Books |
| Search | PubMed | * | for | | | *************************************** | G | Clear | |
| | | ∠ Limits | Preview/Index | | Clipboard | > Delai | ls | | |
| About Ent | rez | Display | Abstract | 6000 3 | how: 20 | Sort | 300000000000000000000000000000000000000 | nd to Text | |
| Text Versi | on | 2 57 A | eview: 0 | | | | | | |

Entrez PubMed Overview Heip | FAQ Tutorial New/Noteworthy E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
My NCBI (Cubby)

Related Resources
Order Documents
NLM Catalog
NLM Galeway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

1: Cancer. 1989 Oct 15;64(8):1629-37.

Related Articles, Links

Interleukin-2-activated lymphocytes from brain tumor patients. A comparison of two preparations generated in vitro.

Kruse CA, Mitchell DH, Lillehei KO, Johnson SD, McCleary EL, Moore GE, Waldrop S, Mierau GW.

Department of Surgery, University of Colorado Health Sciences Center, Denver 80262.

Two preparations of human recombinant interleukin-2 (rIL-2)-activated lymphocytes from patients harboring malignant brain tumors were characterized as autologous-stimulated lymphocytes (ASL) and lymphokineactivated killer (LAK) cells. ASL were generated from Ficoll-Paque-isolated, nonadherent, defibrinated peripheral blood lymphocytes (PBL) that were stimulated overnight with phytohemagglutinin (PHA) and cultured with rIL-2 (100 U/ml) for 10 days. LAK cells were produced by culturing all PBL in rIL-2 (500 U/ml) for 4 days. In 4-hour chromium release assays, LAK cells showed greater cytotoxicity than ASL against natural killer (NK)-sensitive and NK-resistant tumor cell lines; by 18 hours, the effectiveness of ASL equaled that of LAK cells. By electron microscopic study, PBL, LAK cells, and ASL showed differences. The helper/inducer to suppressor/cytotoxic ratio (T4+/T8+) of PBL, LAK cells, and ASL was 1.1:1, 1.0:1, and 0.4:1, respectively. ASL, when compared with PBL or LAK cells, have a significantly higher percentage of MO1+/DR+ and T8+/9.3+ subpopulations. ASL and LAK cells, used for the therapy of gliomas, are distinct.

PMID: 2790675 [PubMed - indexed for MEDLINE]

| Display Abstract | Show: 20 Sort | Send to Text | S |
|------------------|---------------|----------------------------------|---|

Write to the Help Desk
NCBI | NLM | NIH
Department of Health & Human Services
Privacy Statement | Freedom of Information Act | Disclaimer

Feb 25 2005 07:07:33

h

cb

g e e e fcg c

e e e b

b e

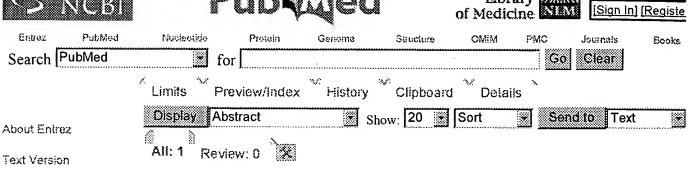
b

My NCE









Entrez PubMed Overview Heip | FAQ Tutorial New/Noteworthy E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
My NCBI (Cubby)

Related Resources
Order Documents
NLM Catalog
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

1: J Neurooncol. 1996 Feb;27(2):133-40.

Related Articles, Links

Adoptive immunotherapy using lymphokine-activated killer (LAK) cells and interleukin-2 for recurrent malignant primary brain tumors.

Sankhla SK, Nadkarni JS, Bhagwati SN.

Department of Neurosurgery, Bombay Hospital, India.

Ten patients with recurrent malignant primary brain neoplasms were treated with adoptive immunotherapy using lymphokine-activated killer (LAK) cells and interleukin-2 (IL-2). Nine patients had supratentorial glioma and they received multiple intratumoral instillations of LAK cells through reservoir-catheter system or burrhole. The other patients with disseminated subarachnoid metastases from posterior fossa medulloblastoma received immunotherapy via lumbar subarachnoid route. A partial and transient clinical response was observed in two patients. following the therapy, and a cystic transformation of the essentially solid tumour was noted on the CT scans of these two patients. No significant clinical or radiological response to the treatment was observed in the remaining 8 patients. The results of this preliminary study reveal limitations of the regional intratumoral adoptive immunotherapy using currently available techniques and provide sufficient evidence of its effectiveness to warrant further investigations.

Publication Types:

Clinical Trial

PMID: 8699235 [PubMed - indexed for MEDLINE]

| Display Abstract | Show: 20 | Sort | Send to Text • |
|------------------|----------|------|----------------|

Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Feb 25 2005 07:07:33

b

b



eukaryotic Search

Dictionary C Thesaurus C Web

<u>Home</u>

Premium: Sign up | Login



ADVERTISEMENT

Dictionary - Thesaurus - Web

Get the Most Popular Sites for "eukaryotic"

4 entries found for eukaryotic.

eu·car·y·ote Pronunciation Key (yōō-kăr'ē-ōt', :ē-ət)

Variant of eukaryote.

[Download or Buy Now]

Source: The American Heritage® Dictionary of the English

Language, Fourth Edition

Copyright © 2000 by Houghton Mifflin Company.

Published by Houghton Mifflin Company. All rights reserved.

eu·kar·y·ote also eu·car·y·ote Pronunciation

 $\underline{\mathbf{Key}} \ (\mathbf{y} \overline{\circ} \mathbf{0} - \mathbf{k} \mathbf{\tilde{a}_r}' \mathbf{\bar{e}} - \mathbf{\tilde{o}_t}, - \mathbf{\bar{e}} - \mathbf{\hat{o}_t})$

n.

A single-celled or multicellular organism whose cells contain a distinct membrane-bound nucleus.

[eu-+Greek karuōtos, having nuts (from karuon, nut. See kar- in Indo-European Roots).]

eu·kar v·ot ic (-ot ik) adj.

[Download or Buy Now]

Source: The American Heritage® Dictionary of the English Language, Fourth Edition

